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Celanese Corp. (CE)

Investor Day

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MANAGEMENT DISCUSSION SECTION

Operator: Ladies and gentlemen, please welcome Chairman and CEO, Lori Ryerkerk.

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Good morning and welcome to our Celanese Investor Day. Thank you so much for joining us today in this virtual format. This event has been a long time in the making. We actually started in late 2019 to really start to reexamine and reset the Celanese strategy based really on just our views of a rapidly evolving global business environment. We would have loved to have done this event in person in 2020 and to share that work, but obviously COVID kept them from happening. So we're excited to move ahead and do this with you virtually today. We have shared many of the components of the strategy already over the past year, but we're excited to bring it all together and share it more fully and also along with our long-term growth outlook.

So with that, let me introduce our team for today and our agenda. Following my initial comments, we'll hear from John Fotheringham, who runs our Global Acetyl Chain business. John first joined Celanese in 1991 as a customer service rep and has had leadership roles in the Acetyl Chain in Europe and Asia before taking on his current role in second quarter of last year. Following John, we'll hear from Tom Kelly, who leads our Engineered Materials business. Tom joined Celanese in 2012 to run our North America Procurement Group. Subsequently, Tom led the Global Procurement team and half of our Engineered Materials business, and took over his current role in first quarter of 2020.

Following Tom, I'm going to very briefly cover our Acetate Tow business and then also spend some time discussing our work on sustainability. Scott Richardson will then provide us a roll up of the business outlooks and discuss cash generation and capital deployment. You all already know Scott well. Scott joined Celanese in 2005. And prior to his current role as CFO, Scott has led both our Acetyl Chain and our Engineered Materials businesses. We'll wrap up the presentation portion of the day with a few highlights on M&A and some of the longer-term contributors to our growth. And then, we'll go into a Q&A session.

Now, you may have noticed this year that we've had a pattern in our investor communications. We've really been trying to highlight the efforts of our people, of our employees before anything else, because ultimately we believe everything we do begins with our people. In fact, if you look at the Celanese values that guide our work, they start with people. It is really our people's dedication and commitment to Celanese that is ultimately what feeds each of our five other values.

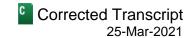
And those values are our commitment to ensure high levels of safety and environmental stewardship across our facilities and offices, a commitment to meet our customers' needs and be a partner of choice, to make products of the highest quality and with reliable facilities, and to build up the communities in which we operate. These are the values that collectively, ultimately allow us to deliver sustained value for our shareholders.

So, let's take a closer look.

[Video Presentation] (00:03:21-00:05:24)

Our employees truly share these values. They also understand how individually and through our collective actions, we deliver shareholder value. Over the last decade, we have been on a path to continuously elevate the

Investor Day



performance level of Celanese. In the early years, that meant building out our competitive positions across all of our businesses. Across the middle of the last decade, we implemented new business models to leverage these competitive positions; the project model which you're familiar with in Engineered Materials and a model that fully makes flexible and optimizes our Acetyl Chain. We spent the last few years further refining these models and driving for commercial excellence.

These actions have lifted our financial performance over this period. That lift happens annually, but it is easiest to see the impact over three- or four-year periods given the amount of volatility we do see year-to-year and some of the business conditions. So 2020 is a great example of that. Even in the middle of a global pandemic in 2020, our adjusted EPS was still higher than all of the years in the prior period or, in this case, 2017.

In fact, 2020 is a perfect example of the power of our focus on controllable actions. The headwinds we faced in 2020 were widespread and they were unprecedented. The closest comparison we have for these headwinds was the financial crisis just over a decade ago. So compared to that crisis, our teams have delivered double the adjusted earnings per share in 2020 as versus say 2008, 2009. I am proud of our teams for taking the necessary decisive actions like those shown in the box on the right, to deliver a really resilient performance in 2020 and to position us to achieve the growth outlook that we will lay out for you today.

Our differentiated performance has been recognized by the market even in periods of disruption like 2020. So, our objective for today is to communicate how we will continue to deliver this strong financial performance over the next several years to continue this track record of shareholder value. And this leads to our theme for today: multiplying our momentum. This is a phrase we've been using internally at Celanese now for about 18 months and it's reflective of where we are along our strategic path. What you are going to hear today builds on the success of Celanese over the last decade, but it is also going to point out a few new themes.

And I'd just want to highlight a few of those for you here today that you will be hearing throughout the presentation. First, our business models in the Engineered Materials and the Acetyl Chain work. We will revisit those models and why we believe they have delivered such superior performance and we will outline how we continue to enhance our models, really focusing on our efforts to win in key end markets. Second, productivity has been a fundamental driver of value at Celanese for many years and it is really fully ingrained in our culture and our identity. You're going to hear today how we are transforming though, how we think about productivity.

We're not leaving behind our legacy of productivity strengths, but we are working to be more forward thinking including using new tools like process automation tools, advanced analytics, artificial intelligence tools and supply chain optimization, to really drive that enhanced profitability. Celanese also has a long history of leading safety and environmental stewardship, but we need to expand our leadership across a number of additional sustainability fronts, a topic which is frankly of increasing importance to all of us. You'll hear directly about our efforts on key environmental and social topics as well as an overview of the sustainable solutions we provide to the market today that address a number of areas of growing demand now and into the future.

Lastly, we'll talk about how we are enhancing our cash generation and capital deployment. We'll provide a cash generation outlook and the businesses will highlight a number of high-return organic projects. We will also cover the robust financial firepower available to us to both invest in high-return M&A and return cash to our shareholders. Our objective as a company remains clear: to deliver long-term, double-digit earnings per share growth annually. This growth is backed by a strong EBIT growth and accumulative three-year operating cash flow of \$4 billion to \$5 billion. Collectively, the actions described within these themes will multiply our momentum over the next three years and beyond, and allow us to continue to deliver industry-leading shareholder value.

So with that introduction, let's move forward with our agenda. I am very pleased to welcome to the stage John Fotheringham.

John Fotheringham

Senior Vice President-Acetyls, Celanese Corp.

Lori, thanks very much indeed. Good morning, everybody. My name is John Fotheringham. As Lori pointed out, I'll be celebrating 30 years of being with the company in October of this year; and over that time, I've lived in all regions of the world. I've spent 20 years living outside of Britain, spent time in Frankfurt, Dallas, Shanghai, and most recently in Amsterdam. Over the course of those 20 years of living outside my home country, I've come to understand the importance of relationships both inside and outside the company; how important our customers are to us, our raw material suppliers, our service providers; and how we operate with inside of acetyls leverages all of that in a way that brings products of quality to our customers, when they want it, in any region of the world where they should have demand.

The business has evolved a lot over last 20 years – the last 30 years of my career. The business has evolved incredibly over the last decade. You heard Lori explain that Celanese's earnings had doubled from crisis financial to crisis health of 2020. Same applies to the acetyl business. We've doubled our earnings in that time period. We've risen our foundational earnings step by step, focused on productivity, focused on technological advancement, focused upon acquisition both downstream as well as upstream, and also bringing together what used to be two discrete businesses, acetyl intermediates and emulsion polymers.

By bringing these two businesses together, we've extended the value chain. We've provided ourselves with additional optionality, additional flexibility, and in a way that can meet our customer needs. Over the course of the next 15 minutes or so, you're going to hear from me four key themes, four key themes that I think differentiates Celanese from the industry. First and foremost, we are the single largest global producer of acetyl products. Secondly, we believe that we have an unmatched value chain, which I'll describe in greater detail shortly.

Externally, we're benefiting from a healthy industry where demand is robust. We've already seen that bouncing back in the fourth quarter of 2020. We're seeing continued strength, as we enter – as we bring to a close the first quarter of this year. We don't anticipate major competitive investment in this space, yet our customers are going to require additional capacity. They're going to require additional reliability. And we've got a theme a program of targeted capital investments where we're leveraging our advantage technology to bring product and capacity to the market as and when it's needed by the industry.

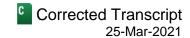
Let me take a break and introduce you to a short video to describe it in greater detail the Acetyl Chain business model. Many thanks.

[Video Presentation] (00:13:49-00:16:38)

Thank you. I hope you enjoyed the video. It was certainly fun making it, and I do actually think it represents the business and how we operate the business pretty well. One of the items within the presentation or the video was the talk about end users. I once came home from work, must've been, I don't know five years ago, my eldest son was 16, he said, dad, what is it you do? I said, well, son, I sell acetic acid and I sell VAM and I sell VAE. And he said, what's that? And I said, well, this is what we do.

Everything that you touch today is likely to have been founded upon acetyl chemistry, whether it's the painkillers, whether it's your cereal packaging, whether it's your food packaging, whether it's the paint and coatings that are on our wall. And he understood. So acetic acid and VAM and VAE are the building blocks of what we do and what

Investor Day



we use every day all around the world. And as I talk about all around the world and I'll come onto our global footprint, our business is still very much as it's been for many years: a third, a third, a third split between Europe, the Americas and Asia.

But that's not the same in any given month or in any given day, because we have an incredibly nimble, focused, commercially savvy team around the world. Dorothy Hara in Europe, Rick Hall in the Americas, Bobby Wong in China, Peter Smith in Asia or outside of China, talking every day, deciding what demand is like at our customers, what products do they need, what applications. We saw China fall away in the first quarter; Europe stayed strong. We saw China come back in the second quarter; Europe entered into the COVID crisis.

This constant moving of our products to meet instantaneous demand of our customers is what sets us apart from our competition. It's supported by flexible, low-cost manufacturing, an incredible procurement organization and a supply chain that allows us to move the product around the world. I was once asked, John, who's your competitor? And I said, well, actually don't really have a single competitor. Celanese is unique as it comes to the Acetyl Chain. We have the longest value chain all the way from carbon monoxide and methanol all the way through to redispersible powders, and we're in every single region of the world.

And it's this global presence that allows us to adapt to global changes, to trends, to market needs, to customer dynamics, and do so in a way that creates shareholder value. The unique value chain allows us to make decisions every single day. Do we sell acetic acid or do we consume acetic acid? If we consume acetic acid, do we make acetic and hydride from it? Do we make esters solvents from it or do we make the second largest product in the portfolio of vinyl acetate monomer? Do we sell the vinyl acetate monomer or do we consume in our emulsion business, where we have the consumption in all regions of the world.

But most excitingly of all is the final step of our value chain, the redispersible powders business that we acquired about this time last year formerly of Akzo, most recently of Nouryon, fully integrated, value-added extension of our existing value chain that gives us flexibility, adaptability and optionality. Our technology has been the cornerstone of what's made acetyls great. Really since the 1960s, we're continuing to invest in technology in a way that is an efficient use of our capital, is based upon what customers needs and where customers want it.

We can build capacity cheaper than anybody else in the world. We believe we have the best raw material conversion. We believe we are the cheapest, lowest-cost producer of the products which is so strategic to Celanese. This is perhaps best exemplified by the acetic acid cost curve. Celanese, the lowest cost producer, is on the left-hand side of the cost curve our three facilities: Clear Lake, Singapore and Nanjing; and I'm often asked about our sensitivity to oil. So I'm going to show it two ways: a lower cost or current cost oil scenario, and on the right-hand side an elevated oil scenario.

In both cases, Singapore, Nanjing and Clear Lake towards the left-hand side of the cost curve, an advantaged low-cost producer. And it's all very well having the lowest cost in Clear Lake or the lowest cost in Singapore or the lowest cost in Nanjing. Whilst we're global, we cannot be in every single country, so we do rely upon supply chain to service those countries where we're not physically present; physically present from a manufacturing standpoint.

And with the help of the procurement organization as I mentioned earlier, with the help of our supply chain group, we're able to translate that low-cost manufactured acetic acid into low-cost delivered-to-customer acetic acid, whether that's the large market of Western Europe or the large market of India with the lowest cost producer in the markets that we serve. I mentioned earlier about the demand recovery, the positive outlook. This is the utilization chart based upon our assessment of acetic acid and vinyl acetate capacity and demand. And you can see in 2020 what COVID did in terms of near-term instantaneous demand reduction.

But it bounced back so quickly, it was incredible what we saw in the fourth quarter of last year and indeed the first quarter of this year. This demand we believe is going to continue to grow in excess of GDP, in many ways driven by changes in consumerism. If we take a house as an example, I think everyone knows paints and coatings and emulsions go hand in hand. But there are so many other applications in and around the home where our polymers can bring additional value, security and sustainability. Our redispersible powders are used to make the cement behind the tiles in your bathroom, stick to the wall with far less cement. Far less cement means far less CO2 being emitted into the atmosphere.

They're also used to insulate the outside, the external walls of our houses to keep us cool and to keep us warm and to lower our energy bills and to lower our energy consumption. And last but not least, we're also in solar panels and we're seeing a huge increase in demand for solar electricity, driven by consumer changes, driven by people wanting alternative sources of energy. In order to make a solar panel, you need high-quality vinyl acetate. And in the last few years, this increase in demand for solar power has represented about one world-scale vinyl acetate plant.

So, Celanese faced with this opportunity to grow is investing in our businesses and you all have read that last night in our announcement. We've talked about our methanol expansion at Clear Lake. Not conventional methanol; methanol that can be made from CO2 which is currently emitted. We've talked about the VAM expansion in Nanjing. And we've also introduced the fact that we're going to be building a new VAE emulsion polymers reactor in Nanjing as well as in Frankfurt. We're seeing huge growth in the value-added downstream part of the Acetyl Chain. But in order to be successful, we're going to have to invest in the front end into the acetic acid.

We mentioned a few months ago that we had changed our strategy, we had changed our plans for acetic acid, but we were not going to pull away from doubling the capacity of the world's largest facility at Clear Lake in Texas. What has changed is, we're not going to be rationalizing production in Asia as a consequence of that growth. And what has also not changed is the fact that we're going to deliver \$100 million of annual benefit from growth and productivity through operating our assets better, having the flexibility and adaptability to produce only what's needed by the market. No rush to sell out these units, they're there for the long term, they're there for the future. Flexible commercial strategy supported by flexible manufacturing capability.

We've talked about or I've talked about the expansion of the vinyls business; this is incredibly exciting for us; the VAE expansions in Nanjing and Frankfurt; the VAM expansion leveraging our advanced technology, learning from what we've previously done at Clear Lake 2019, taking that technology, implementing it in Nanjing. And for a fraction of the cost of a new plant, we're able to generate significant capacity to provide our customers the product that they need and the quality they needed, and also to support our emulsions business and our powders business.

Many of our products are used in sustainable applications. I've talked about the solar panels, I've talked about the house insulation. We're also looking at how to make Celanese more sustainable. We're utilizing now solar panel powered with the same solar panels that we supply electricity into Clear Lake. We're constantly assessing whether or not we can access and utilize bio-based raw materials. And I've mentioned the Clear Lake methanol facility, which in effect is going to be taking about 44,000 cars off the road, average car, average driver. That's the amount of CO2 that we're going to be capturing and converting into low-cost methanol to support our business growth as we needed in a way that's sustainable.

Investor Day



And last but not least, we're delighted to be able to announce that our acetic acid or much of our acetic acid is benefiting from being labeled as – of recycled content. And this is also going to provide opportunities for our customers as they consider their sustainable goals. If I consider productivity, if I consider technology advancement, if I consider our globality, if I consider the resilient global market that we service, if I consider our uniqueness, I feel very, very strong indeed that we're going to be able to make a step change again to the foundational earnings of the Acetyl Chain business.

And by the middle of this decade, I would expect the business to be generating between \$901 billion of EBIT a year. And that's a growth profile which is actually in keeping with how the business has grown since 2010. This is a growth profile that represents about 6% to 7%, 8% per year. If we go back a decade, the business has grown by closer to 10%.

Many thanks for your time. And with that, I'd like to introduce my good friend, Tom Kelly, who runs our Engineered Materials business. Thank you very much.

Tom Kelly

Senior Vice President-Engineered Materials, Celanese Corp.

Thank you for the introduction, John, and certainly exciting times ahead for the Acetyl Chain business. Good morning. I'm Tom Kelly. And as John mentioned, I lead the Engineered Materials business here at Celanese. And I'm kicking off with this slide, because it highlights why I'm so excited to lead the 1,200 people in Engineered Materials, because each day we come to work to help our customers create really cool products that people use every day to improve their lives.

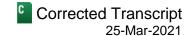
I'm going to start off by summarizing what you'll hear about this morning and four key takeaways. First, our project pipeline model, coupled with the industry-leading breadth in our polymer portfolio, continues to be the foundation of our competitive differentiation. And today, you're going to hear about how we're continuing to make that model even more powerful and more scalable. On top of that, we're going to talk about how we're going to add another layer of growth through investment and innovation focused programs in areas including future mobility, connectivity, and medical and pharma. By getting ahead of these disruptions, we're creating a vast new opportunity pool and our growth programs position us to capture even more value by being first to market with our solutions.

Next, we've been growing our sales at greater than double digit rates in Asia over the last 10 years, and we'll talk about the investments we're going to make in manufacturing, R&D and talent to continue our double-digit growth trajectory there. And finally, we are not only launching a full set of sustainable offerings for our current markets, but we also see a huge opportunity to leverage our innovative, biodegradable and compostable cellulose acetate-based offerings to address the growing challenges associated with single-use plastics.

But let's start by reminding everyone why we are the first choice solution provider for our customers. First, we have the broadest range of polymers to choose from and this is unique. But why is it important, because while our competitors promote a limited set of polymers, we gain the customers' trust because they know that we are polymer-agnostic. Celanese is completely focused on providing our customers with the optimal polymer to solve their problem and get them to market quickly. We then combine that polymer range with our ability to replicate our customers' processing and test methods. And that enables us to provide rapid prototyping capability to accelerate our customers' development.

For example, we can stretch our GUR into ultra-thin membranes in our Shanghai lab for evaluation by our lithium-ion battery separator customers, or we can produce a center console for a car in our Florence, Kentucky labs.

Investor Day



And we extend this industry-leading breadth of innovative solution capabilities and application support across a wide range of exciting and attractive end markets, as you can see on the right-hand side of this slide. We've also expanded our polymer breadth and market access to position us for future growth through our recent acquisitions.

As an example, our flame-retardant nylon technology and nylon recycling capabilities from our Nilit and NEXT acquisitions are enabling Celanese to address emerging trends in electric vehicles and sustainability. And our M&A playbook is always guided by what we see as needed competencies or market access that we believe will be important for the future of the Engineered Materials business. Also we've taken strategic actions to maximize shareholder value from our joint ventures by divesting our passive stake in Polyplastics to provide firepower for capital deployment initiatives and by turning KEP into a manufacturing joint venture which will give Celanese control over marketing of half of the POM molecules produced from that operation.

And we don't stop at having the broader set of polymers. We continuously expand the set of tailored solutions by enhancing polymer functionality. The orange circles at the bottom of the slide represent capabilities we've added since our last Investor Day. And these capabilities have enabled us to penetrate fast-growing segments like battery separators for electric vehicles and antennas for 5G, which we'll talk about further along in the talk today. We expect our business to grow over the next several years due to recovery in the automotive and medical end markets, but that growth is largely market based and will materialize not only for Celanese, but also for our competitors without much effort.

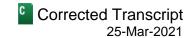
At Celanese, we then layer in several percentage points of growth by running our project pipeline model hard every day and operating model that we've turned into a finely tuned engine over the years. But what's new for us and really exciting is the growth that's going to come from our focused program efforts. About 18 months ago, we created focused program teams to develop strategies and innovation efforts designed to capture an outsized share of specific end markets. These were markets that we believe would experience significantly higher growth rates, resulting from megatrends like climate change or the demand for greater connectivity.

The key here is very simple. Identify the winners to work with along the value chain and then determine the innovation that's required in terms of technologies, new products or business models. What's also different is that these focused program teams are staffed with dedicated resources in an incubator approach with a clear mandate: free from daily P&L reporting and completely polymer-agnostic in their approach. And their sole goal is to design a pathway to succeed in the targeted space, whether through new product development, capability enhancements or even add capabilities through M&A.

So having these program teams understand the full industry landscape and identifying how we focus and capture that growth, has been both exciting and productive. We're also confident that we can add another layer of percentage points of growth above market from these innovative and focused program efforts. And what does this all mean in terms of the earnings outlook for our base business? Well, if you go back in time, prior to 2015, we were consistently generating only about \$200 million of base business earnings annually from our Engineered Materials business.

And when I refer to base business earnings, I'm referring to our earnings excluding the contribution from our affiliates. But in 2015, we implemented our project pipeline model and then layered in additional growth through our nylon acquisition strategy. This lifted our foundation earnings profile into the \$300 million to \$450 million range. And while 2020 was a very challenging year, we are confident that a strong recovery is underway in 2021 and we would layer on the contributions from our enhanced project pipeline model and our growth programs. We're confident that we can increase our base business earnings by over 15% per year by 2023.

Investor Day



I thought it would be helpful to provide an overview of our project pipeline model for those investors who may not be as familiar with it, as it is truly foundational to our Engineered Materials business. It starts with our commercial teams who are meeting every day with our customers to understand their polymer needs and the value of a solution that Celanese could bring to the table. The next day, all of these – we review all these opportunities through an expert committee who determines which projects we should work on and which ones we should pass on, based on their extensive business judgment and technical expertise. But they also utilize proprietary digital project scoring tools to make sure we're working on the right projects based on all of our previous experience.

What's so novel about this though? Well, we've been running this project pipeline model for seven years now and have accumulated an immense amount of data with respect to the tens of thousands of projects that we've either won or lost. And we've been leveraging our data analytics platform which sits on top of all that data, to tell us which applications we tend to win and with which polymers. Why is it so important? As an example, back in 2019 we've realized that we had about a 72% win rate when we pursued POM opportunities for fuel system applications in the Americas.

So we developed a very targeted campaign to identify all the potential customers for these systems to ensure that we were in front of them with our solutions, and this led to a doubling of pipeline contribution for this application in 2020. And it doesn't stop there. This data can be sliced and diced in so many ways to inform product line strategies, account plans, regional growth strategies, pricing and service levels. It significantly improves the efficiency of our resource allocation to those projects that are most likely to succeed and create the most future value for Celanese and shareholders. We also see significant opportunities to further leverage digitalization to scale and improve the predictability of our model, while also increasing the velocity of projects.

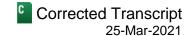
For example, we're working on a project this year to build an artificial intelligence engine that sits on top of all of our polymer formulation and product performance data so that when a customer comes in and asks for very specific performance profile, this AI engine suggests either an existing product or it generates a starting point polymer formulation for our product developers. This will enable Celanese to get a solution to a customer several weeks or even months before any of our competitors. And this accelerated capability will ultimately provide our customers a competitive edge with respect to their time to market.

We've also evolved in our thinking about the metrics we use to measure the performance of our pipeline. While we previously focused on winning a targeted number of projects each year, we've recognized it's more important that we focus on the value of the future business that we win each year, because this is ultimately what drives earnings growth for Engineered Materials. And we do this by looking at peak sales revenue from each project. And this represents the revenue that will accrue to Celanese when a customer fully ramps the production of their part that uses our polymer, and this peak revenue will differ based on market segment.

For example, in electronics, usually that occurs about six months after we win the business, while on auto it normally takes 18 months to 24 months. But our focus on peak sales revenue has already been showing results, as we delivered a 16% increase in peak sales revenue per project in 2020 versus 2019, just by focusing on higher value projects. I think it's also important to highlight that the pipeline withstood the test of COVID-19. While the onset of COVID-19 meant that face-to-face meetings with our customers which we really miss, were paused, we were proactive in the use of webinars and other digital techniques to connect with existing and new customers, enabling us to deliver nearly the same rate of sales revenues from our project pipeline in 2020 relative to 2019.

Now, let's turn and focus on our growth programs. In 2019, we launched four growth programs that are already active in driving growth at Celanese: future mobility, medical and pharma, connectivity, and sustainability. And we're going to dive into each of these in more detail on the following slides. Mind you, we do expect a number of

Investor Day



programs to grow and evolve over time as we continue to look for other areas where secular growth potential intersects nicely with what our Engineered Materials business brings to the table. And we've seen significant early success from our program team efforts.

As an example, we saw 60% increase in peak sales revenues from projects we won in the electric vehicle space in 2020 compared to 2019. So while much of this work is focused on growth for the future, I can assure you that the future is happening now in Engineered Materials. And remember that these focused program teams are staffed with dedicated resources in an incubator approach, with a sole objective of designing a pathway to success in the targeted space whether through development of innovative technologies or business models or even acquiring capabilities we need through M&A.

Now, let's cut to a video our team put together to bring to life our focus areas and capabilities in the future mobility space.

[Video Presentation] (00:41:13-00:43:52)

Welcome back. I hope the video helped you see why we're so excited about our growth potential in automotive. The opportunities in future mobility cut across a broad array of applications and Celanese product lines. As we continue to make vehicles safer and enable autonomous driving, this results in a significant increase in electronic content. Over 30% of the bill of materials for a car today is driven by electronic content and it will increase to 50% by the end of this decade. This drives an increasing need for our polymers for applications like high-speed connectors, control units and sensors where we are already a leading player.

In the powertrain for an electric vehicle, there is a need for higher temperature resistance and flame retardancy which makes our polymers ideal in modules like the electric motor or the inverter, and then zooming in on the battery itself. Our GUR plays a critical role in improving the safety, vehicle range and recharging time of the battery. We are the only supplier of this material to the industry who has relationships at the tier level, the OEM level; and we leverage these relationships to make sure we stay ahead of the curve with our product development efforts.

Our GUR for this application has been growing at greater than 20% annually, and this growth has driven the need for our expansion in Bishop which will occur in Q1 of next year, and our recently announced expansion in Germany in 2024. So not only do we expect a strong recovery in auto builds from 2020 through 2023, but the proportion of hybrids and electrics in the build mix increases significantly. If you live in the US, I know it's difficult to imagine a world where electrified vehicles are a big part of the mix. But amazingly, one-half of all new model launches in the US in 2021 will be either hybrid or fully electric, and the proportion is higher in Europe and Asia.

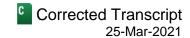
So an electrified world is right on our doorstep. And that's good for us, because the chart in the middle shows how our accessible polymer content increases significantly as we transition away from conventional vehicles to hybrids and fully electric vehicles. And that translates to an accessible market for Engineered Materials that is growing by greater than 10% over the next several years. And Thomas Liebig, who is based in Germany and leads our future mobility program, is pushing to get more than our fair share by engaging early with leading OEMs and tiers to get our polymers specify.

Now, let's introduce our second growth program, medical and pharma, through a video that describes the incredible opportunity in front of us.

[Video Presentation] (00:46:33-00:49:34)



Investor Day



You just heard from Laura Brand, who joined us from Amgen, and now leads our medical and pharma business. And what's exciting about this business is that it showcases how Celanese adds value beyond just supplying the right polymer. We also enable our customers to accelerate their development timelines through our design and processing capabilities by providing regulatory support, which is critical for success in this market segment.

Our polymers are used in a broad array of applications. We're the only medical Grade GUR supplier qualified today for use in knee and hip implants. And one of our most recent GUR innovations is being used in the tips of COVID test kits. We're also the leading supplier of medical grade polymers for inhalers and injection pens. And the ability of our LCP polymer to make very small, but high strength parts makes them ideal in applications like insulin pumps and other wearable devices.

I'd like to do a deep dive though on our VitalDose EVA platform, which is gaining attention in several new therapeutic areas to improve the patient compliance. The benefit of our EVA for pharmaceutical delivery is really demonstrated in the chart on the left. There are some drugs that can only be delivered via shot at a doctor's office. These shots can be very painful, and the issue is that a high dosage needs to be delivered initially because the drug will eventually disappear from the body over the next 30 days. This uneven dosage level of the drug in the body is not ideal from a treatment perspective, but there are times when the shot is the only way to administer it.

These inconveniences can lead to patients avoiding going to the doctor altogether. But with VitalDose EVA, the drug can be compounded with our polymer and then inserted into the body under the skin in the form of the thin rod. The drug will then release from the rod at a very consistent rate over a period of six months to two years. This improves patient comfort levels and also removes any concern that the patient will adhere to their treatment plan. We view VitalDose EVA as a huge growth opportunity for us over the next several years, and our recent investments in application labs position us to greatly accelerate development plans with our customers.

Now, let's move on to connectivity. You can't watch a sporting event on TV these days without seeing a commercial from Verizon or AT&T about 5G. And at Celanese, we're really excited about how we're participating in applications that are growing as a result of the higher frequency 5G transmission. What's unique about our functionalized PPS and LCP solutions is that they enable these super high frequency 5G waves to pass through the polymers with minimal distortion or signal loss. This makes our solutions the polymers of choice for applications like antenna frames in 5G base stations as well as high-speed connectors in mobile phones.

And what's really cool about our LCP technology is, you can actually dial in the degree of functionalization of our LCP polymer to deliver tailored performance around signal transmission, because in an application in autonomous driving it's going to have different requirements for transmission compared to that of a mobile phone. And this is an area where Celanese is leading, with a 60% increase in peak sales revenues from projects in 2020 and with 10 patent filings just in the last 18 months. This space is evolving and customers, along the value chain, are refining the roadmaps constantly. But we're in their shops partnering with them, tailoring our products and supporting their design tweaks to get to the optimal solution. And as you would expect, this gets us specified into their designs from a very early stage.

Let's move on to sustainability. In the last 12 months in particular, we've seen the level of customer interest for sustainable offerings significantly increase. But at Celanese, we're flexible in our approach to help our customers meet their sustainability goals. For more technically demanding specified applications where customers can afford any performance variability, our efforts are focused on reducing our CO2 footprint without impacting the final polymer performance.

For example, our POM ECO-B is currently produced from sustainably sourced methanol, and soon we'll be using methanol produced in our Clear Lake facility using recycled CO2, as John mentioned earlier. And we're already experiencing commercial success just a few months after launch, with customers like Ypsomed who will use POM ECO-B in their Ypsomed zero auto injector to help them meet their sustainability goals. For those applications that are less demanding from a performance standpoint, there is significant interest in polymers with between 20% to 30% recycled content, and that's where our Ecomid recycled nylon portfolio comes in.

Celanese provides value by ensuring a consistent, reliable supply of recycled polymer and customers are willing to pay a premium for that supply reliability. And finally, we're all conscious of the fact that the world consumes hundreds of millions of tons of single-use plastics each year and only 10% to 15% of those plastics are recycled. Consumers and brand owners alike are looking for packaging alternatives that are truly biodegradable or compostable.

And so, our customers are working with our BlueRidge cellulose acetate pellets and Clarifoil films to replace polyethylene and other single-use plastics in a broad array of packaging and food contact applications. We are really proud that we have proactively launched a full set of sustainable offerings for our existing customers and new customers, and we're confident that we're uniquely positioned to benefit from the growing need for sustainable solutions.

Another key element of our growth story is around our Asia localization strategy. First, I want to give a shout out to our Asia team led by Kevin Liao, for driving growth in excess of 18% per year since 2010 and for delivering top line growth in a very challenging 2020. But to continue on this growth trajectory, we need to do much more to localize.

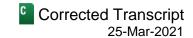
Historically, all of our growth in Asia came from winning opportunities at development centers in the US and Europe and then making sure that we held on to that business as our customers transfer their production to Asia. Now, there are entire industries like lithium ion batteries where all of the leaders are in Asia. We also have global auto and electronics OEMs that expect the same level of service and responsiveness regardless of where they're located around the world.

And in the last 18 months, we've made significant investments to meet those challenges. We've invested heavily in our Shanghai labs and we've expanded our nylon compounding capacity in China. We've also substantially ramped up staffing in our customer-facing and R&D organizations to work with our customers to identify and drive more projects through our pipeline. And we've also localized decision making around new product development and commercial priorities. And the team in Asia has never been more energized.

As we move forward, we will continue make future investments to enable our growth in Asia. For example, we've recently announced our plans to invest in an LCP expansion in our Nanjing facility, which will enable us to supply the rapidly growing market for high-speed connectors and 5G applications at a lower CO2 footprint and with greater responsiveness to our customers. We're also happy that we've just announced that we're expanding capacity at both of our China compounding facilities as well as our compounding location in India.

So to summarize, Engineered Materials is a fantastic business. Our unparalleled polymer breadth and application capabilities make us the first supplier that customers call for help and our competitively advantage project pipeline model continues to drive above market growth. And when we layer in the growth we expect from our future focused program efforts in future mobility, medical and pharma, connectivity and sustainability, we see a clear line

Investor Day



of sight to grow our EBIT contribution from \$550 million in 2021 to \$700 million to \$750 million in 2023, and at the same time, increase our EBIT margins to mid-20% levels, which is pretty incredible.

So we'll now take a short break. And when we come back, Lori will lead us through Acetate Tow and sustainability. Thank you.

Operator: Ladies and gentlemen, please welcome back Chairman and CEO, Lori Ryerkerk.

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Welcome back, everyone. I'd like to spend the next few minutes talking about our Acetate Tow business. As you all already know, although Acetate Tow remains an important contributor to Celanese, it now makes up a much smaller proportion of our earnings than in past years and we do not really expect it to be a driver of our growth through 2023. For these reasons and in the interest of time, I'm going to cover Acetate Tow very briefly today. We've added a few appendix slides to today's presentation materials that will provide you some additional detail on this business for anyone who's interested.

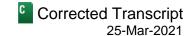
And while this sector is named Acetate Tow and Clear Lake tow filter materials still makes up the majority of this business, I actually wanted to broaden our discussion today beyond tow. Inherent in this business is a unique sustainability value proposition. All of the products in this business are made from wood pulp; pulp made from sustainably forested of trees and internally sourced acetic acid. As a result, all the products made in this business are biodegradable, breaking down to vinegar and glucose. And as the world is increasingly looking for more sustainable solutions, this business is uniquely positioned.

Importantly, acetate flake, which is the precursor to tow, can be produced into a number of other materials beyond tow. In Celanese, we also convert acetate flake into Clarifoil, which is a film used in a variety of packaging, antifog and other applications and BlueRidge, which is sold in pellet form and can be processed in a similar manner to plastics. And while revenue from both products is still quite small, we do see increasing opportunities for both.

And while tow is not a driver of our earnings growth, it does remain a valuable contributor to Celanese. Tow continues to generate very healthy margins and strong cash flow, and tow is a central link between our businesses with a chemistry that connects the Acetyl Chain and Engineered Materials. Tow is sourced from acetic acid from the Acetyl Chain. That acid is converted to acetate flake. That flake is then sold to Engineer Materials where it is converted to Clarifoil and BlueRidge, both of which are sold as part of the project pipeline model. The Acetate Tow business remains a potential supplier of sustainable materials to Engineered Materials for other possible products.

The adjusted EBITDA outlook for tow remains stable. The secular decline in demand for tow is steady and predictable. And we have line of sight to offsetting the impact of that decline in demand with growing dividends from our China affiliates. Our China affiliates now represent more than half of our Acetate Tow adjusted EBIT and continued productivity in our own base business also helps to offset this decline. And although we are not yet baking in any meaningful contributions from alternative uses of flake, because it's still really early days as I already discussed, that does present an additional opportunity in the future to help offset this decline in tow demand.

Investor Day



Although, please note, earnings from sustainable new applications for tow will show up in the future in the Engineered Materials sector. In short, we're confident tow is going to continue to deliver the adjusted EBIT of approximately \$245 million a year for the foreseeable future, along with generating continued robust cash flow.

Our discussion on cellulosic acetate transitions perfectly to the next item on our agenda, sustainability. We understand the importance and the urgency of sustainability and sustainability or stewardship as we've referred to it historically has been a focus of Celanese for years. I'm excited to be addressing this important topic directly with you today and proud to share with you our accelerated progress here.

We've used sustainability both as a responsibility and an opportunity. Sustainability really starts with our culture. It's embedded within our vision, improving the world and everyday life through our people, chemistry and innovation, and it, of course, aligns with our Celanese values.

More importantly, sustainability presents opportunities to drive growth in our businesses and differentiate Celanese. It allows us to foster greater creativity and thought via our diversity and equity initiatives. It allows us to attract and retain the best talent. It allows us to operate and compete freely, staying well ahead of regulatory or other changes. And it allows us to mitigate a wide variety of potential risks to our value generation and the Celanese reputation. It allows us to focus our commercial efforts on meeting increased customer demand for more sustainable products and solutions and it's a driver for accelerated future growth.

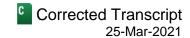
Before diving into the details, I want to spend a minute on our overall approach to sustainability. Everything we do in sustainability fits under three pillars: preserving the environment, investing in our people and communities, and advancing safe and sustainable customer solution. Overarching these pillars is our focus on governance which we think is equally important and it is the means by which we navigate these sustainability topics. We extend our sustainability efforts deep in each pyramid and you see a few examples here, the variety of topics that we – as some of which we'll cover today.

Let's go and start with governance. So I want to highlight the structure that we recently put in place to ensure both, again, the breadth of our thought and our accountability around governance. Our strategy and our commitment to sustainability is guided by an ESG Council we formed in the third quarter of 2019. This committee is made up of approximately 30 Celanese employees from across a number of functions and locations. It's Chaired by Lynne Puckett, our General Counsel. The council meets regularly to discuss and guide our sustainability evolution and reports up through the executive leadership team.

Our board is also actively engaged and committed to robust ESG practices. We have specific board committees who are responsible for the various sustainability topics as well as we have oversight by the entire board of the overall ESG effort. Over the past 18 months, the ESG council has made significant progress. We have completed an analysis to identify those material ESG topics for Celanese. We've launched an enhanced sustainability website and we are committing to align with SASB standards and UN Sustainability Development Goals. This ESG council is really the overriding governing body for the progress that I'm going to share in the next few slides.

Let's start with the environment. Celanese is committed to preserving the environment and helping our customers do the same. We have a long track record of delivering reductions in our energy usage, which is also correlated to real productivity savings. In addition to reducing our consumption of resources, we have made meaningful reductions in our waste and emission profiles, we've reduced solid waste, VOCs and greenhouse gas emissions. Looking forward, we will be setting baselines and establishing targets for each of these key areas, driving global investments such as we've already done with our combined heat and power unit at our Lanaken site which reduces CO2 emissions and our onsite incinerator project in Nanjing to help mitigate hazardous waste.

Investor Day



A particular focus is climate change. We recognize that the nature of our operations is our energy and fossil fuel intensive and we're investing in projects that will increase our energy efficiency, recover and reuse waste heat and increase our purchase of renewable and more sustainable energy in raw materials. As an example, I'd like to highlight two of the major initiatives that we've recently undertaken at our Clear Lake facility.

So, we recently announced a new solar energy contract for our Clear Lake facility which will supply about a third of our annual electricity consumption. Not only is this really competitive with our historical energy electricity purchases, but it also equates to the removal of nearly 15,000 cars from the road every year.

We're also excited about the announcement we made yesterday about the new initiative involving the use of recycled CO2 to be used as an alternative source for methanol production at Clear Lake. John talked about the commercial opportunity earlier, but the displacement of this – the carbon from this process equates to almost 40,000 cars off the road every year, truly significant. Also, in 2020, we adopted and published a climate policy for Celanese.

Let's jump to our second pillar, which is investing in our people and communities. You see a series of achievements across a number of fronts here on the slide, so let me highlight just a few. I am particularly proud of the culture of diversity and inclusion we continue to foster at Celanese. As a result of this culture, we continue to grow our diversity at all levels of the organization, including our board of directors and our executive leadership team, and that diversity extends down into our organization with our managers across the company being comprised of 28% women globally and people color in US management at 29%.

I am also proud of our track record on workforce and process safety that remains a core part of our culture. We continue to look for ways to further improve this area and share our learnings and processes with other companies. And finally, the numbers speak for themselves, but we continue to do tremendous work contributing to the communities where we operate via the Celanese Foundation and our employee volunteers.

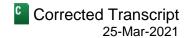
We know that a diverse, equitable and inclusive workforce is key to driving innovation and growth, personally and as a corporation. We drive our DE&I work similarly to the way we do the broader sustainability work with a broad and diverse advisory council. We established a global DE&I council last year and we routinely report out on our DE&I topics to our board of directors.

Really helping to drive employee engagement in this area, we have established employee resource groups and employee interest groups as an essential component of this strategy and these groups are really as diverse as our employee population as you can see from the examples on this slide.

And finally, with everything we are doing, it's important for us to be a leader in the space and engage with others beyond Celanese. For example, we're engaging with some key industry and academic organizations in promoting STEM and in our recruiting efforts, groups such as the Society of Women Engineers and the National Society of Black Engineers and the American Institute of Chemical Engineers.

We're also working to carry out our commitment to our suppliers as well with a really robust and defined program to support women and minority owned businesses. By intentionally employing a workforce comprised of diverse individuals, we believe we empower our organization to think more innovatively, to foster inclusion and respect, and ultimately deliver optimal value to our customers and shareholders.

Investor Day



Turning to the final of our three pillars, I want to highlight sustainable solutions. When we think about providing safe and sustainable solutions and products to our customers, we view this as both a responsibility and an opportunity. Our responsibility begins with ensuring our products are handled and used in a safe manner. We are enhancing our chemical safety education within all of our value chains to meet this responsibility.

This commitment also extends to managing our supply chain to ensure that we are minimizing risks not just to Celanese, but also to our communities and ensuring our partners are aligned with our values and priorities. And that means that we want to increasingly source renewable and bio-based inputs into our supply chain, including energy and raw materials.

I also want to emphasize that we view the push for more sustainable solutions in the world as a tremendous opportunity. We believe Celanese and our customers are well-positioned to benefit from progress towards a more sustainable economy. Our chemistry platform is well suited for the transition to renewable and bio-based feedstocks, and we're making progress in this area in all three of our businesses. We have a large and growing portfolio of products that meet the demand for sustainable solutions across many end markets, including products made from recycled materials and products that can be recycled or are biodegradable.

Let's take a look at how we at Celanese are driving greater sustainability through our product innovation.

[Video Presentation] (01:17:07-01:20:25)

We are so proud of the product offerings you just saw and the work we're doing to continually grow our portfolio. Today, these products that focus on sustainability represent about one-third of our net sales in 2020. Some products like Clarifoil and BlueRidge are still quite small, but growing rapidly. Others like our sustainable auto solutions and renewable Acetyl Chain products are much more meaningful.

For each of these sustainable products, we bring real value proposition to our customers to improve their own sustainability. And you can see a few examples of those again on the right. Across most end markets, we are seeing greater demand for these products. Importantly, we are also seeing willingness from many customers to pay for the added cost of providing such solutions.

We are proud of our past leadership that we have seen in Celanese on sustainability and the accelerated progress we've made over the last few years. As we look to the future, we have a clear internal roadmap of the steps ahead. We will be gathering more data on our part and tracking key metrics important to our investors. We are working to align our data and metrics with industry standards, in this case SASB, to make them easier to comprehend and compare.

You'll also see us disclose more around about our performance with future targets and revamped sustainability reports in the website, and you will see expanded offerings of sustainable products and products geared toward supporting a more sustainable world. We fully intend to continue to be a leader in sustainability and we are confident it will be a critical component to how we generate shareholder value going forward.

And now, let me hand it over to Scott Richardson, who will take us through our section on financial excellence.

Scott A. Richardson

Executive Vice President & Chief Financial Officer, Celanese Corp.

Thank you, Lori, and good morning, everyone. Lori mentioned earlier that we've been working really hard over the last 18 months to dive deep and come up with these strategic action plans. And while some of these strategic



Investor Day



actions may change over time and some of them look different than some of the plans we've had in the past, for example, we have an increased amount of organic CapEx this year. But the reality of it is, is that the focus on creating sustainable shareholder value has not changed. Those core principles will continue to remain paramount for us as a leadership team as we focus on driving growth.

That discipline around shareholder value for us really comes in the form of as a leadership team what we call the three we will's, we will invest time and effort to evolve our leading franchises. And you've heard today from Tom and John, just what we're doing across the globe to make sure that we continue to evolve as our world changes. The second is that we will leverage these businesses to drive strong cash generation and deploy that cash in really accretive ways for our shareholders. And the third is that we will focus on driving double digit earnings per share growth over the long period of time.

Double digit EPS growth per year is a metric that we put in place back in 2012. And it just so happens 2012 is the last time I can remember where we really kind of started from ground zero with our strategy like we did here 18 months ago. We kind of started from scratch and said what is the world going to be doing as we go forward and what do we need to do to respond to that. But at the end of the day, we need to drive double-digit EPS growth. The top decile companies in our space are the only companies that do that and that is what we strive to do here at Celanese.

As the CFO, I don't get a cool video, but I do get this slide and this slide in many ways is better than any video that I can put up there, because this slide shows that we have done just what we set out to do back in 2012. We have grown EPS at double-digit levels during this timeframe. And for us, we think this is what success is all about because it gives us the ability to then go and drive growth with that cash.

As we look at some metrics going backward, one of the most important ones we look at both externally and internally is total shareholder return. Over the last three years, we have driven 47% TSR. Kind of breaking down important components of TSR, cash flow yield, ROIC and shareholder yield, we continue to be above our peers.

Over the last decade, we have delivered positive TSR in 9 out of 10 years, which is more than any of our peers. We have averaged a TSR of 15%. If you look at how that breaks down on the right hand side of this chart, you can see that 10% is driven by earnings growth, share repurchases and dividends. We look at this as really the controllable elements of TSR, earnings growth, share repo and dividends. Multiple expansion in some ways isn't necessarily controllable.

However, we believe that if you do those three other things, the multiple expansion follows. Now, many of you know we haven't been always been thrilled with how quickly that multiple expansion has followed, but it has followed. And so in many ways, this is really all controllable and that's how we view it.

Kind of taking that slice of the shareholder yield, share repurchases and dividends, this you can see the earnings growth of the company and what this has yielded in the last three years? We have been able to deploy over a \$1 billion per annum over the last three years in these two areas and that really truly controllable piece of TSR has been between 8% and 10% during this timeframe.

So that's kind of some metrics as we look backward and it's important because it sets the foundation for what we strive to do with the strategic plans that you've heard today. The pillars of those strategic plans are very similar to what we've had in the past. Now, some of the actions are different as I mentioned earlier, productivity, business model enhancement, organic investment and high return M&A continue to be the things that we really focus on to keep the organization aligned around driving double-digit EPS growth.

The first of those elements is productivity. Productivity has been a hallmark of the culture at Celanese. We set a goal of \$150 million to \$200 million a year of gross productivity. Now, in the past, the manufacturing bucket of productivity has represented more than half of our most of our results each year. However, last year, you can see here on this chart, procurement actually drove about 50% of the higher level of productivity that we had.

As we go forward, you're going to hear us talk more and more about the business enterprise component of productivity because this component of productivity is an area where we can really leverage emerging technologies like RPA and business analytics to drive additional cost reduction as well as revenue generation.

There's three examples here of productivity. The first two are the traditional types of productivity that we've talked a lot about it at Celanese. Clear Lake acetic acid expansion project where we're going to leverage low cost raw materials and be able to flex capacities to be able to drive additional earnings growth with a really high level of return; the second is an example with the European compounding changes that we made and announced during 2020.

It's an example of how we think about adding capacity, but taking out some capacity to shrink our footprint, get cost reduction, but still have the same amount or in some cases even more capacity to grow. And the third is really an emerging type of productivity. It's how we invest in our business enterprises, kind of some of our back office functions to really enable top line revenue growth.

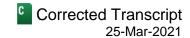
Lori talked a few years ago about our end-to-end supply chain transformation project, largely focused on Engineered Materials. Our businesses have grown rapidly in the last five years. But some of our core business support elements haven't grown as quickly. And this is an example of investing in our core. We're going to see savings from this project of about \$20 million this year. We think it can even grow in subsequent years beyond this, but this is the type of productivity you're going to see more from Celanese.

How we break down a project like this I think is important and there's a lot here on the slide. But we really kind of look at each element of these business enterprise functions that we have. We break them into work streams. We look at the various drivers and we make sure that the benefits are there with high returns to drive savings, but also at the same time improve satisfaction for our employees and our external stakeholders. The supply chain transformation project is not the only project that we have to drive productivity in our functions. We have projects coming in order to cash and record to report is two example areas of where we will be able to drive additional savings in the future.

Organic investment is an area at Celanese that we've always been really highly scrutinizing around. We have been very disciplined about the capital that we put into our businesses and we are going to see an increase in capital over the next several years because we needed to grow. We will average likely about \$500 million or so maybe even a little bit more over the next three years. That CapEx profile for us while historically has been about 50% MOB and EHS and 50% revenue generation and/or cost reduction, you're going to see a much heavier weighting towards rev gen and cost reduction in the future, because MOB and EHS will remain at about this \$150 million level where we've historically been.

But it's important for us that we think about returns in the holistic amount of capital and our entire bucket of capital which usually is between \$300 million and \$350 million a year, we've been able to get in excess of a 20% return on that capital. The entire ROIC for the enterprise over the last three years has been approximately 20%, which has really outpaced all of our peers and we expect this to continue. Now, it may come down a little bit as we increase M&A and with the additional firepower that we have on the balance sheet we expect that to continue.

Investor Day



This may trend down a little bit versus where we have been. However, we do believe that it will remain industry-leading.

Our business plans will yield high quality earnings. You've heard from John and Tom and Lori today about some of the things that we're doing to make sure that we are not standing flatfooted that we are focused around growth. In Engineered Materials, we expect EBIT in excess of \$700 million in 2023 and that's going to come from the consistent focus around our pipeline and continuing to grow in markets that are really changing. We are seeing some massive disruption in some of our key end uses and there's going to be more jump balls out there than there have been historically, but Tom Kelly and the Engineered Materials team is positioned to take advantage of those jump balls as they occur.

In the Acetyl Chain, with the plans in place to continue to focus on the optionality of our businesses, we believe we're going to approach a \$1 billion of earnings by the time we get to 2023. And the evolution of continuing to add new capacities into our existing footprint will give us more optionality than we've had in the past. And Acetate Tow is the same as it's been in the over the last several years, it's flat, around \$250 million of earnings over the next several years despite a decline in some of our key end use demand areas.

What this adds up to is EBIT between \$1.7 billion and \$1.8 billion by 2023. And what that translates from a cash flow perspective is into about \$4 billion to \$5 billion of operating cash flow. The uses of this cash, \$1.5 billion the CapEx as I talked about, a \$1 billion to dividend as we continue to grow that a little bit each year, but then we have about \$1.5 billion to \$2.5 billion of excess cash generation that we can deploy for either share repurchases or opportunistic M&A.

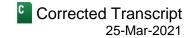
If we then look at how the balance sheet looks today and you can see our debt to EBITDA metrics ticked up a little bit as earnings went down during 2020, but as we – with the updated outlook for this year, we think this metric is going to drop below two this year. With the fact that we don't have any big debt towers coming up in any year, we have more flexibility around the balance sheet as earnings improve over the next three years, our metrics will continue to improve, so it gives us more flexibility. So if we look at what that firepower is today, we have \$1.2 billion of excess cash on the balance sheet.

We have \$4 billion to \$5 billion we expect from operational cash flow I mentioned. When you take off \$2.5 billion for dividends and CapEx and then add probably about \$2 billion of additional debt capacity based upon the cleanliness of the balance sheet I just talked about, that gives us up to \$6 billion of firepower that's available for opportunistic M&A or share repurchases. This is more flexibility and more opportunities than we have ever had as a corporation. And we expect to be able to add to what we think is already a really great base strategy.

Earlier this month, I was lucky enough to celebrate my 16th anniversary here at Celanese. And as I think about what makes us great and what makes us – gives us the ability to grow like I talked about, it really comes down to three simple things and we all kind of share these values. One is we focus on making money, make more money tomorrow than we made today and translate that into cash and be disciplined in how we deploy that cash.

The second is take care of each other, whether that's our employees, our customers, our shareholders, our communities or our environment, making sure that we are being holistic in how we take that cash and deploy it in really accretive ways for the whole. And the third is that we have a good time doing it. You've heard throughout today's presentation, the presenters talk and drop names and people that are out – around the world who work for Celanese, whether it's Lydia or Bobby or Thomas or Stefan or Jillian or Trinity.

Investor Day



When we say these names, we all know who they are. And it's that essence of the culture and then that togetherness that we bring that allows us to do what it is we set out to do which is grow earnings at double digit levels per annum. And what that base strategy will yield is \$13 to \$14 of EPS by 2023. But this base strategy does not include that additional – deployment of that additional firepower that I just talked about a minute ago.

To take you through how we're thinking about deploying some of that firepower around opportunistic M&A and to close out today's presentation, I'd like to invite Lori back on stage. Thank you.

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Thanks for that, Scott. As you can tell, we are all very excited about the future of Celanese. We've covered a lot of content here today. So, I'd like to just wrap this all up with a few final comments.

First, please keep in mind the outlook that we've provided today is based only on controllable actions. There are things within our control. This may be different from how others have done it. This may in fact be different than how we have done it in the past. But we have not assumed any unusual underlying market growth, or execution of major M&A in our numbers. As such, we believe there are still many opportunities to generate incremental value even beyond this outlook. Meaningful M&A is but one example of how this can be done.

Thirdly, we have extended our investment horizon to look further into the future. There are a number of projects and initiatives we're working on, and in fact have talked about today that will generate value and growth for Celanese beyond this 2023 outlook. We believe it is this ability to deliver earnings growth through our controllable actions that has been recognized by the market over the last decade. And the upward trajectory is clear and we expect to continue to deliver strong earnings growth in the years ahead.

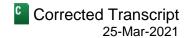
As I said earlier, we wanted our financial outlook to be based on those things that are within our control. But we know that there are opportunities beyond this base case that will support incremental value creation. Some of these opportunities are driven by the market like the pace at which consumers transition to electric vehicles or to alternatives to single-use plastics which would benefit Engineered Materials. Both are growing today, but we could see drivers, regulatory or otherwise, that would further accelerate this growth.

Similarly, any acceleration in the pace of infrastructure build across the various regions of the world in support of economic growth could have a very favorable impact on the Acetyl Chain. Other opportunities could be driven by markets supply dynamics, an obvious one could be the future curtailment or rationalization of higher cost or more polluting acetyl capacity in China. We've not assumed any meaningful action there in this plan presented today, but it could be there in the future. Additionally, any changes in the tow industry like further consolidation or rationalization among producers could impact the landscape and we've not assumed anything there.

Finally and perhaps most impactful, we have not assumed any significant or transformational M&A opportunities in our outlook. Certainly, any degree of meaningful M&A at our return criteria would create value beyond the outlook we've shared.

So given that opportune with M&A, I wanted to provide some additional context for how we think about our current portfolio. The first thing I want to make clear is there is real value generated from having our current Celanese portfolio of businesses. Said another way, we are confident that simply breaking up this portfolio without a triggering M&A or other event would destroy real value. That value comes from a wide variety of factors.

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It starts with the diversification of our end users. So as an example, auto makes up a third of Engineered Material sales, that's significant. But for total Celanese, it's more like 10% or 15%. In fact, if you look at the top end markets for each of our businesses, there's virtually no overlap and so as result Celanese is a uniquely diversified company both from end uses and geography. Certainly, there are cost efficiencies. We have highlighted these for years.

These savings come from shared raw materials and procurement scaled, shared functions and corporate overhead and product integration within our businesses. There are also natural hedges that exist within our businesses, everything from currency to raw materials that reduce our overall volatility. And our businesses have complementary cash generation and capital needs. As an example, Acetate Tow generates tremendous cash flow, but has lower capital needs in either Engineered Materials or the Acetyl Chain, and most of that cash gets redirected to drive growth in Engineered Materials and Acetyl.

Lastly, there is real value generated by the talent and business model innovations we share across the businesses. Engineered Materials and the Acetyl Chain perform at higher levels by the collaboration that can occur within the businesses. I don't highlight this value to redirect away from changing our portfolio, but to say that any portfolio change must be part of an opportunity to generate greater value for shareholders.

With that context, let me share a little bit more about how we look at M&A. Our approach to M&A has been and will continue to be disciplined and consistent. There are a few criteria frameworks we use when we assess M&A opportunities and you see some of that criteria here on the slide. To clarify, there's no opportunity out there that meets all of these criteria. But you should expect that any potential M&A we do would check multiple boxes in these four categories in a meaningful way.

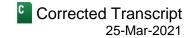
From an industry standpoint, we look for the same industry advantages as Celanese currently enjoys. Leadership positions from a capacity or a cost position as well as opportunities for product integration, either upstream or downstream. From the commercial side, we'd look at the target's operating model and whether it is complementary or could align well with ours. We'd look at the capabilities or product offerings of the target and whether it would further differentiate our portfolio. And we'd also look at complementary additions, either in end markets or geography with our own businesses. This also holds true from a technical side. Does the target have differentiated technology or knowhow that would add to our knowledge base or does it have formulation or application expertise that would be additive to our own?

Finally and this is really a reflection of the other criteria, any M&A must deliver financially. The backbone of any deal would be synergies and opportunities for productivity. We are focusing on deals which are accretive and can provide a double digit return. Based on these criteria, let me give you a sense for the expanded lens that we are using to consider our opportunity set.

What you see here is really just for Engineered Materials, but we have a similar chart for the Acetyl Chain. In Engineered Materials, we look to add to our businesses across four fields of opportunities: capabilities, materials, geography and applications. Within each of those, there is a spectrum of opportunities which is shown here by the concentric circles that are closer to what we do today and further afield. Any M&A opportunity we look at will have a certain degree of overlap or not with Engineered Materials in each of these four fields. Our preferences will always be to add to Celanese near our core because it represents less risk and effort to create value.

But that said, there may be opportunities to step out a bit. That could also make sense with an appropriate return profile. You can see that there are a lot of different areas we could target and then there are many others we have

Investor Day



not included here. There is a very large landscape of opportunities where the Engineered Materials model in this case could be leveraged to drive shareholder value.

What does all of this discussion of M&A mean for shareholder value? This outlook assumes that 100% our excess cash generation over the next three years goes to share repurchases and M&A. The most likely scenario is some blend of both M&A and share repurchases. In a scenario we're able to direct that cash to M&A and particular if we were to leverage our balance sheet capacity that's got highlighted to complete meaningful high return M&A, you could create billions in shareholder value from synergies alone.

Any upgrade in the market perception of Celanese and our valuation multiple would present an opportunity to create billions additionally on top of that. Across the first part of 2021, we were trading around \$15 billion in market cap. That is \$5 billion more than in 2015. We're trading even a bit higher currently. Over the next several years, we have line of sight to adding another \$5 billion plus in value creation based on the strategy and outlook we've outlined today. There remains on top of that the potential for another \$5 billion plus of value creation for meaningful high return M&A. This again is not baked into our outlook, but it is an opportunity which we are prepared to execute.

We continue to actively work on M&A with a pipeline that includes targets, large and small. We have a small team that reports up to me that is dedicated to leading our M&A efforts. They continue to build out our pipeline to include new adjacencies like the ones I highlighted previously. I continue to speak with my counterparts at other companies about opportunities to generate added value. In the last year, I've had at least more than a dozen such conversations and our M&A team has evaluated several dozen more potential new targets. While we remain active, we also remain disciplined.

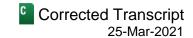
Finally, the financial outlook we have provided today for earnings per share and cash generation goes out just to 2023. However, many of our projects and the initiatives we have shared today will only deliver meaningful value beyond 2023. So, we have extended our strategic and capital deployment processes to be more forward-looking. You can see here on the right a number of specific projects we have talked about that will not fully contribute until after 2023.

As you can see from the chart on the left, these projects will yield yet another step up for EPS. We are confident in the plans we have outlined here today and the fact that the path to get there is within our control, we are also confident that we have potential opportunities to drive value well beyond these levels and actions identified to deliver continued growth well into the future.

To conclude, I really just want to share a few thoughts and my observations on Celanese, now that I've had not quite two years on the job. We are a company of 7,700 unique and distinct individuals. But as different as we are, we share a common culture that defines how we generate shareholder value. This is all about who we are and why we win. It starts by focusing on what we can control, managing our own destiny and building business models that are resilient through a range of economic conditions.

We focus on things like productivity, manufacturing excellence and disciplined capital deployment as a few examples. We work to deliver innovative solutions every day to our customers. That goes beyond our physical products to the services we provide and how we get those products to our customers. We continue to expand our commercial optionality in our businesses as a key driver for our value generation. We evolve our models to be increasingly more flexible and resilient.

Investor Day



We generate robust cash flow and allocate that capital in a disciplined manner. And we embrace the differences among our people and we work to maintain a culture that fosters diversity and inclusion. And finally, we are working to deliver a growing portfolio of sustainable products to our customers and to improve our own sustainability. These actions and the commitment and the passion of our people are the real driver behind our success, both past and future.

With that, I'd like to thank you for joining us for the presentation portion of our Investor Day. We hope you will stay with us for the Q&A portion. For those of you who would like to ask a question, we ask that you mute over your webcast and dial into the phone number that will appear shortly on the screen. Otherwise, just stay where you are and we will go ahead and take a 10 minute break to queue up for the questions. Thanks again.

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Welcome back, everyone, and we are now going to begin our question-and-answer session. I believe we have our operator on the line, Alyssa. Alyssa, can you hear us?

Operator: Yes.

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Great. All right, let's please proceed with kicking off the Q&A.

QUESTION AND ANSWER SECTION

Operator: Thank you, Lori. Welcome to the Celanese 2021 Investor Day question-and-answer session. All participants will be in listen-only mode. [Operator Instructions] We will now begin the question-and-answer session. [Operator Instructions] The first question today comes from John Roberts with UBS. Please proceed with your question.

John Roberts

Analyst, UBS Securities LLC

Thank you, and congrats on the good guidance there in 2021 and 2023. On the Acetyl slide number 9 with the cost curves, why isn't there a higher price on the right side with the higher oil scenario or is it just maybe the scale is different between those two cost curves?

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

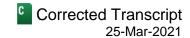
John?

John Fotheringham

Senior Vice President-Acetyls, Celanese Corp.

John, hey, it's John Fotheringham, thanks for the question. I think what it demonstrates is our agnosticness, if that's the right word to oil in Singapore. And while we'll see some limited increase in cost between \$40 oil on the left and \$80 oil on the right, we don't see it as very meaningful, John.

Investor Day



John Roberts

Analyst, UBS Securities LLC

Okay. So that solid price line or that marginal price line, you actually would see that much higher in the higher oil scenario?

John Fotheringham

Senior Vice President-Acetyls, Celanese Corp.

I would anticipate a higher prices as a function of oil, but not really meaningfully.

John Roberts

Analyst, UBS Securities LLC

Okay. It's driven by coal then or what, so you see coal is stable irrespective of the oil price environment then?

John Fotheringham

Senior Vice President-Acetyls, Celanese Corp.

That's correct. I think coal has been stable now for a number of years and we don't see that fundamentally changing at least from a Chinese perspective.

John Roberts

Analyst, UBS Securities LLC

Great. Thank you.

John Fotheringham

Senior Vice President-Acetyls, Celanese Corp.

Thank you.

Operator: The next question comes from Duffy Fischer with Barclays. Please proceed with your question.

Duffy Fischer

Analyst, Barclays Capital, Inc.

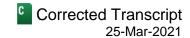
Yeah. Good morning. First question, just on the slide where you walked through the 13 kilos of your plastics on today's ICE vehicles going to 30 when we get to EVs, can you walk through your primary polymers, which ones make up the most growth in our any of them actually down and then what's the marginal or the margin we should expect on that increase in 17 kilos, is that a better margin in your today business or is it worse?

Tom Kelly

Senior Vice President-Engineered Materials, Celanese Corp.

Yeah. Good question, Duffy. I'd say the polymers they get the most benefit are nylon, PPS, LCP, PBT, POM is basically it's a wash between internal combustion engine vehicle and battery electric vehicle. And then, as it relates to higher margin, the way I would think about it, Duffy, the reason we've got these focused program efforts is to make sure that we're way ahead with our customers, with the OEMs and tiers that are leading in that space. And the intention there is to get these wins with higher value application solutions. So, we would see that the margins being higher than normal with the internal combustion engine vehicle, if that helps.

Investor Day



Duffy Fischer

Analyst, Barclays Capital, Inc.

Great. Thanks. And then just a follow-up for Scott, if I could, on that \$6 billion of investable cash over this period, again, if you just looked at that versus a buyback, that's almost a little over a third of your shares in today's stock price. One, I just want – is that realistic to assume that that full \$6 billion could get employed by the end of 2023? And if you just do that simple calculation of buying back shares is a mile marker for how much accretive that could be to earnings, is that a fair way to look at it?

Scott A. Richardson

Executive Vice President & Chief Financial Officer, Celanese Corp.

Yeah. I mean. I think in our mind, Duffy, that is deployable over this time period. Now, we will be opportunistic with that and we'll also be disciplined with that and I do think that's a fair way to look at kind of how we would see the bottom end of that over time.

Duffy Fischer

Analyst, Barclays Capital, Inc.

Perfect. Thanks guys.

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Thank you.

Operator: The next question is from Bob Koort with Goldman Sachs. Please proceed with your question.

Robert Koort

Analyst, Goldman Sachs & Co. LLC

Thanks very much. I think this one is for John, if we look at that cost curve you showed and obviously we always like to see that kind of data, it's very helpful. I'm curious how is that relative competitive position or your absolute place on those curve changed over the last several years? I know you've obviously had some capacity changes, you've had some raw material contract changes, maybe talk to us about how that relative and absolute positioning has evolved over the last three, four, five years?

John Fotheringham

Senior Vice President-Acetyls, Celanese Corp.

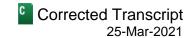
Yeah, Bob, thanks for the question. I think if we consider the two facilities in Asia, Nanjing and Singapore, we recently concluded very successful negotiations with our partners both in China and Singapore where we've been able to provide longevity for those sites at a considerably lower cost. I would also say that as part of those negotiations and working with our suppliers in both facilities, we've also developed far greater levels of manufacturing flexibility which is in keeping with the business model. But I think I have to offer my huge congratulations to our procurement team for developing really strong relationships at both facilities. And then if we consider Clear Lake, then our backward integration into methanol has enhanced us and again revitalized carbon monoxide contracts at that facility has also enabled us to continually shift leftwards down the cost curve.

Robert Koort

Analyst, Goldman Sachs & Co. LLC



Investor Day



If I could follow up on your slide 11 that you said global operating rates I think combined for acetic and VAM, you do feel some demand left but really not much effect on utilization. I think Lori maybe in your comments, you suggested there is no more assumption of take-outs in China. So is the incremental supply that needs that demand from Celanese, is it broader based? What are your assumptions there?

John Fotheringham

Senior Vice President-Acetyls, Celanese Corp.

We are aware of one project that's going to be starting up in China later this year and we're also expecting that that startup will be succeeded in a year or two with some rationalization at an older facility that's currently in operation. So we anticipate that healthy supply demand outlook continuing through the middle of the decade with both acid and VAM approaching those 90% utilization rates. And we've seen a rapid recovery in demand following the declines we experienced in the second and third quarter of last year.

Robert Koort

Analyst, Goldman Sachs & Co. LLC

Great. Thanks very much.

John Fotheringham

Senior Vice President-Acetyls, Celanese Corp.

Thank you.

Operator: The next question is from Jeff Zekauskas with JPMorgan. Please proceed with your question.

Jeffrey J. Zekauskas

Analyst, JPMorgan Securities LLC

Thanks very much. In your Acetyl Chain projection for 2023 of \$900 million to \$1 billion, there's so much capacity that you schedule coming on in 2023. Do you need that capacity to come on to hit that range that you're giving or is that capacity really for the out years? And then in Engineered Materials, your projection is \$700 million to \$750 million, what's the range of equity component to that number? That's my first question.

John Fotheringham

Senior Vice President-Acetyls, Celanese Corp.

Jeff, I'll take the Acetyl question first and the answer quite frankly is the expansions we announced last night really won't have a meaningful impact at all upon 2023. They'll all be starting up during the course of that year, but we'll support the earnings growth that Lori pointed out forward into 2025.

Tom Kelly

Senior Vice President-Engineered Materials, Celanese Corp.

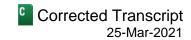
Yeah. Jeff, I can take the EM question, on the affiliate contribution in the \$700 million to \$750 million, I would think about is roughly about \$75 million by that point in time we expect only to have contribution from Ibn Sina and Fortron as affiliate earnings flowing into our P&L.

Jeffrey J. Zekauskas

Analyst, JPMorgan Securities LLC



Investor Day



Okay, great. Thank you for that. And then for my follow up, your earnings for 2021 were about a \$1.50 higher than you thought and maybe that's about \$210 million in EBITDA. If you had to divide it up into price, volume and raw material, how would you divide it?

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Yeah. Let me take that, Jeff. So, I would say, if you'd look at the increase I mean certainly in the Engineered Materials area, it is some volume as well as price, I would say equally split. In acetyls, we had assumed pretty full volumes already. So, it's primarily there in terms of price. I mean raw materials are actually up. So, that's actually an offset to the higher prices that we're seeing in the market.

Jeffrey J. Zekauskas

Analyst, JPMorgan Securities LLC

Okay, great. Thank you so much.

Operator: Your next question is from Mike Sison with Wells Fargo. Please proceed.

Michael Sison

Analyst, Wells Fargo Securities LLC

Hey, good morning, everyone.

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Hey Mike.

Michael Sison

Analyst, Wells Fargo Securities LLC

Nice start to the year. Just a quick question, you had a slide regarding sustainability as a percent of sales, looks like about a third. What percent of that pie is adjusted EBIT and just wondering if as you grow that, is that a higher margin business to grow longer-term or is it because of the investments made a little bit lower margin as you think about the investment there in the next couple years?

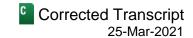
Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Yeah. Let me take that Mike. So if you look at that third sales that we classify as sustainability sales, about a third of that is in to, I'd say, sustainable e-mobility automotive solutions. So I think bio-based materials, recyclable materials, materials that go into light weighting and that sort of things. Those tend to be pretty good margin materials and we suspect that that will continue. So I would say those kind of are probably higher than average margin materials.

About a third of it is our Acetate Tow solutions as well as Clarifoil and BlueRidge, although those are very small. So those tend to be good margin as you know. And then the other third is the remaining sustainability solutions in EM and the Acetyl Chain. And there again I would say, I wouldn't call them lower margin solutions. I mean they are growing areas. But there's a range of materials there. And so I would say that's probably – I'd characterize those as average if you look at them all together.

Investor Day



Michael Sison

Analyst, Wells Fargo Securities LLC

Got it. And then a quick follow-up on the – I think it was slide 93, the broad M&A opportunity set. You've done – Celanese has done a great job over the years adding polymers and different materials. So I'm just curious when you think about biopolymers, particularly the couple public companies with no sales, no capacity, no nothing, and they get value pretty high. How you're looking into that part of the market to expand. You want to do it organically first and then move in there. And then kind of similar question like China Chemicals, it's kind of a unique area, just curious how that could fit in potentially longer term for Celanese in M&A?

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

So I would say on the biopolymers, Mike, we've looked quite deeply at all of the various biopolymers out there. Quite frankly, we think well we already have with cellulose acetate, so BlueRidge and Clarifoil are superior in many ways to some of the PLA and PH that are better out there. That said, we are going to continue to look at them because as we see the demand for biopolymers growing, obviously, we want to make sure we have portfolio offerings of biopolymers much like we do everything else. So we continue to look at them, but we're actually from a characteristic standpoint both in terms of how it operates and function as well as biodegradability and everything, we think our solutions are quite good now, but we will continue to look at them.

Let me turn it to Tom for some comments around other polymers.

Tom Kelly

Senior Vice President-Engineered Materials, Celanese Corp.

Yeah. So I think you focused on biopolymers, but I think we still have a lot that we can add to the portfolio in Engineered Materials even in the traditional engineered thermoplastic space. I think about poly cell phones is being an opportunity where we can broaden out into medical and automotive even more than where we are today. Some PPA materials or so some more high heat nylon out of the portfolio would be great in a lot of electronics and auto applications.

And even an exciting area, when acquired SOFTER, we did it to make sure that we could expand our nylon capabilities. But also what came along with that was a nice little elastomers business and elastomers are a little bit unique, they are a little bit more elastic than your traditional thermoplastics and that enables us to really provide functionality that we couldn't provide with our existing thermoplastic set. So we feel like there's a lot of opportunities in the area of elastomers as well, whether it's TPC, TPV to expand our portfolio quite meaningfully.

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

And Mike, I'm sorry I didn't quite catch the second part of your question.

Michael Sison

Analyst, Wells Fargo Securities LLC

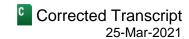
I was just curious on the opportunities with electronic chemicals, how you sort of...

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Electronic chemicals...

Investor Day



Michael Sison

Analyst, Wells Fargo Securities LLC

...materials.

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Yeah, look, that's kind of in the far circle we look at it, it's an interesting fit with our portfolio. If you look at end markets, there's certainly a lot of overlap there. If you look at the way that they are formulated and marketed, that's probably very similar to our business model. So it's an interesting area, but it is moving further away from our core.

Michael Sison

Analyst, Wells Fargo Securities LLC

Got it, thank you.

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Thanks.

Operator: The next question is from Vincent Andrews with Morgan Stanley. Please proceed with your question.

Vincent Stephen Andrews

Analyst, Morgan Stanley & Co. LLC

Thank you. If I could just ask a follow-up on Clarifoil and BlueRidge, I know you mentioned that they're small now, but obviously very large potentially total addressable market. So maybe you could just talk a little bit about what type of customer tests or applications you're in process with and when you might think you have more news on that as well as how much capacity you have today versus how much you might want to have in the future and how you've to go about that, is it available to you from a flexibility perspective as is or do you have to make a CapEx investment and if so what kind of ballpark in CapEx we'll be talking about?

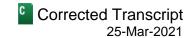
Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Yeah, great question. So let me talk about them separately. So if we look at Clarifoil, so Clarifoil is the biodegradable film. We've actually made it for quite some time and we've been marketing it on performance characteristics for its clarity, for its ability to be in food contact and I mean quite frankly it was very small and not growing because it is more expensive than maybe more hydrocarbon sourced materials. We changed that strategy up last year and said actually this is a really good sustainability product. We started marketing it more as a sustainability product and actually saw a 20% growth in Clarifoil sales last year. So, we think there is something there as people understand the product better. It goes into mostly food packaging, also interestedly really used for anti-fog, so inside ski goggles or inside refrigerator cases. So, it has a wide variety of applications.

That we currently make it in the UK. We have existing capacity on the ground to expand. We can pretty in a very low cost way expand that capacity. So, I'd say there we'll just grow to meet customer demand, which we do see growing pretty robustly over the next few years.

Investor Day



BlueRidge, of course, is a very new product for us. We've just formulated it. We've just introduced it last year. We see a wide variety of interests from folks. Quite frankly, we're still working to come up to scale to where we can provide sufficient volumes to all of those folks who are interested to do larger scale testing. But think about replacement of single use plastics, thinks about – so current things that are being looked at are replacing plastics use in straws or cup lids or coatings inside paper cups that now the whole thing can be biodegradable.

So, think about more not plastic bottles per say, but think about other uses where typically you'd use polyethylene or something like that being replaced with BlueRidge. So, it's not really expensive. It's made from flake. It's compounded. So the cost of producing it is not as significant capital investment. But it's really working right now to get that up to scale and really meet the demand we're seeing from potential customers to do large scale testing.

Vincent Stephen Andrews

Analyst, Morgan Stanley & Co. LLC

Okay. And if I could just follow up on the recycled CO2 methanol, if you can just talk about the cost competitiveness of that and is that something actually more expensive to do it that way. Are you going to be passing that along to your customers or how should we thinking about the economics?

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

So I'll let John comment, but in fact, using vented methanol on site at Clear Lake in our existing – and because we have additional syntheses capability there to make methanol because we have a good source of hydrogen there from our partners, I would say actually our recycled CO2 methanol is at about the same price as buying methanol from third party. But John, you may want to provide some additional color.

John Fotheringham

Senior Vice President-Acetyls, Celanese Corp.

Yeah, Lori, thanks. I think we're excited about the project first and foremost and how that can bring value to our customers. And we'll see whether we can capture that value whilst our customers capture value in turn. And just to follow up on Lori's comment, this is actually quite a competitive source of manufactured methanol relative to the market and also relative to our existing capability at the site.

Vincent Stephen Andrews

Analyst, Morgan Stanley & Co. LLC

Thank you very much.

Operator: And the next question is from Ghansham Panjabi with R.W. Baird. Please go ahead.

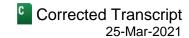
Ghansham Panjabi

Analyst, Robert W. Baird & Co., Inc.

Hi. Good morning. Thanks for all the detail. I guess first off on the EM segment, slide 20 we showed Asia volume CAGR of 18% over the past decade, how will that number sort of evolve through your outlay in 2023 target timeline in context of your changed approach to JVs in the region to give you more commercial flexibility. And then just more broadly for EM, given all the megatrends you outlined, mobility and sustainability, et cetera, how should we think about the evolution of your polymer platforms to kind of participate in these advanced requirements that your customers are going to have over time?



Investor Day



Tom Kelly

Senior Vice President-Engineered Materials, Celanese Corp.

rates to what you've seen historically.

Yeah. Good. Good question, Ghansham. I think on the Asia volume CAGR, you should expect it to continue to grow at roughly the same pace it's been growing, a lot of excitement over there as I mentioned earlier this morning about the growth potential, great team over there. They have all the commercial assets they need to go out on the ground and grow that business, so we're pretty excited about it. So we think about it growing at similar

Then on megatrends, we feel really good about how we're positioned to participate in all four of those areas we talked about today, whether it's future mobility or connectivity or medical and pharma and sustainability. Obviously, there's some we could add to the portfolio that we would provide even more benefit. I mentioned poly cell phones, high heat nylons, elastomers. But right now, just with what we have, nylon in particular, that acquisition strategy was really thoughtful because it really positioned us way ahead of the game for the growing opportunities that we see in connectivity and also in future mobility. But we feel pretty good about where we are.

Scott A. Richardson

Executive Vice President & Chief Financial Officer, Celanese Corp.

Let me just add on the point Tom made about the Asia growth, when we switch the cap venture from the equity earnings line up into our direct sales, we will see a one-time bump. So kind of getting back to that normalized level of growth between 15% and 20% per annum is not inclusive of that one-time jump.

Tom Kelly
Senior Vice President-Engineered Mate

Senior Vice President-Engineered Materials, Celanese Corp.

That's right.

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Yeah. And I think our capital...

Ghansham Panjabi

Analyst, Robert W. Baird & Co., Inc.

Got it. And then...

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

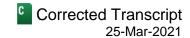
Sorry, I think our capital spend profile also reflects really growing into those platforms that we're described really focusing on LCP which is important for our connectivity and e-mobility, focusing on GUR really important for e-mobility as well.

Ghansham Panjabi

Analyst, Robert W. Baird & Co., Inc.

Got it. Thanks Lori. And I guess a broader question for maybe you and Scott, just from an earnings trajectory standpoint, I mean clearly there was a dislocation in 2020, 2021 is seeing some level of mean reversion, supported by a guidance raise from last night. As we kind of think about 2022 and 2023, I understand there's a lot of complexity in the world, should we expect some moderation from a growth standpoint in 2022, just given your

Investor Day



bump up in 2021 until your growth initiatives kick-in more fully in 2023 or do you see some linearity between the two years. Thanks so much.

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Yeah. So, I think from a growth standpoint, I mean, we project really robust growth going forward. I mean, obviously, we had outside growth this year 2021 versus 2020 as 2020 was such a down year. But I think on an average basis, if you look over several years, we continue to expect very robust growth. Now, from a pricing standpoint, clearly, we think there's a bit of a dislocation right now in the Acetyl Chain market that we're benefiting from. We don't expect that to continue forever. So I would expect some moderation in the Acetyl Chain as we move through the second half of this year and into 2022.

But that said, the projects that we're doing, productivity, growth projects and Acetyl Chain will continue to every year bump up kind of the foundational level of earnings of Acetyl Chain and we'll just continue - as we saw this year, we will have periods of dislocation where we see a benefit, but I don't expect this year's good pricing to continue into 2022 and 2023.

Scott A. Richardson

Executive Vice President & Chief Financial Officer, Celanese Corp.

Yeah. And I think one thing to keep in mind is that volumetrically, we are going to continue to see some level of recovery and the storm that we've seen here in the first quarter is going to impact how quickly supply chains can rebuild. So we'll see some of that volume come back in 2022 which will help offset some of the price decline that Lori talked about.

Ghansham Panjabi

Analyst, Robert W. Baird & Co., Inc.

Terrific. Thanks everyone.

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Thanks.

Operator: The next question is from David Begleiter with Deutsche Bank. Please proceed with your questions.

David I. Begleiter

Analyst, Deutsche Bank Securities, Inc.

Thank you. Good morning.

Lori J. Rverkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Good morning.

David I. Begleiter

Analyst, Deutsche Bank Securities, Inc.

Lori, a question for you and John, again, on Acetyls, you just talk about normalized quarterly earnings of \$170 million to \$200 million. The new guidance implies that's been bumped up to about \$25 million to \$250 million. Can

Investor Day



you talk about that step up and what's driving that set up, you mentioned a few things already, but little more detail on that quarterly normalized step up.

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

John, do you want to take that?

John Fotheringham

Senior Vice President-Acetyls, Celanese Corp.

Yeah. Hi David. It's driven by really two things, growth that we're seeing in excess of GDP, an extension of the value chain as we continue to invest on debottlenecking projects in emulsions and also the powders. It also comes from the favorable market dynamics that that I described earlier as well.

David I. Begleiter

Analyst, Deutsche Bank Securities, Inc.

Very good. And maybe again just on Q1, Q2 dynamics on acetyl, how much has the pricing benefited, i.e., how much should the earnings fall off perhaps the back half of the year versus first half a year in acetyls?

John Fotheringham

Senior Vice President-Acetyls, Celanese Corp.

As Lori and Scott explained, certainly we're seeing elevated pricing today which is really being caused as this rapid recovery in demand, almost an unprecedented recovery in demand which quite frankly we hadn't expected to come back so quickly. So we will see a softening of pricing in the second half of the year.

Now, that said, I think the storm that Scott referred to created a level of disruption and dislocation, which I don't think the industry has ever experienced. So it's going to be a while for supply chains to recover. So had you asked me that question prior to the storm, I would have said we would have seen a quicker falling off in pricing. I think the disruption – the disruption to the supply chains, including from Asia or into Europe, that's in all the newspapers at the moment is going to lead to a level of dislocation which the whole industry is going to have to be battling through here for the coming months.

David I. Begleiter

Analyst, Deutsche Bank Securities, Inc.

Thank you.

Operator: Next question comes from Hassan Ahmed with Alembic Global. Please proceed with your question.

Hassan I. Ahmed

Analyst, Alembic Global Advisors LLC

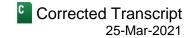
Good morning, Lori.

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Good morning.

Investor Day



Hassan I. Ahmed

Analyst, Alembic Global Advisors LLC

Just wanted to sort of pick up where you guys just left off on sort of the Winter Storm Uri impact. Obviously a lot of crosscurrent, some of those you guys have touched upon, just wanted to sort of understand the puts and takes and the duration of the impact of this, a variety of companies that I talk to or talking about how even prior to this storm, their own inventory levels were quite lean and as obviously the storm happened, a variety of force majeures were declared. And the recurring theme that I keep hearing is that just to get back to normal inventory levels, it may take us till September. So what do you guys see it on your own product side of it, inventory, pricing and also on your raw side of things and how long do you think the impact will sort of linger on for?

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Yeah, look, this was a big storm. I mean, I've been in the industry 35 years and this is the worst winter storm I've seen in Texas with the largest and most widespread impacts through the wider, oil and gas, through chemicals, through specialties, value chain. So, this was a big deal and there certainly was a big impact. I would say it came at a time that we were seeing rapid demand recovery across all businesses. So, we were already going into the storm with fairly low inventories in all of the value chains as you know people weren't necessarily prepared or couldn't ramp up production fast enough to meet the increase in demand. So I would say already tight supply situation, an unprecedented storm that impacted pretty much everybody across Texas and Louisiana, which is a large part of your producers, did add up to having a severe impact on the industry.

The good news is, we're back up and running. We are producing nearly 100% occasional raw material disruptions, but closer to 100% which provides an opportunity now to start resupplying our customers, hopefully rebuilding inventories. But as John alluded to and I would say the same is true for Engineered Materials, it is going to take a while. We're saying it's going to take through second quarter maybe slightly into third quarter. I wouldn't be so bold as to suggest the month, I mean it depends how fast everybody in the industry gets up. It depends how well demand continues.

Clearly, we have some concerns on the demand front as well, as we see re-emergence of COVID in Europe and a lockdown in Germany and other places, is that going to have an impact? So, there's a lot of factors here. But clearly, we feel really robust demand, desire to rebuild inventories through at least the end of the second quarter and probably a bit into third quarter. And with that, pricing will be positive as well until we see people get back to a more stable position.

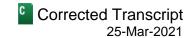
Hassan I. Ahmed

Analyst, Alembic Global Advisors LLC

Very clear, Lori. And as a follow-up on portfolio management, you rightly so didn't spend too much time on the Acetate Tow segment. Obviously, I understand, high margins, very healthy cash flow generation, and obviously you integrated your other businesses as well. I mean, I know you guys tried some solidarity moves earlier which went successful.

But would you consider a sale of that business potentially? So, that's one part. And part and parcel with that, how are you guys thinking about the affiliates, as they sit today? I mean, whatever restructuring/stake sales that you had to do, are they behind us? Would you consider upping stakes, maybe buying out certain affiliates? How should we be thinking about those two?

Investor Day



Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Yeah. Look, on Tow, Tow is becoming a smaller and smaller part of our business. So, this is basically flat and our other businesses continue to grow so that's why we didn't spend a lot of time on it. I mean, quite frankly, Tow now is smaller than some of our portfolios in Engineered Materials. So, that's really why we didn't spend the time. But look, Tow is still a good business. It is integrated into our businesses. I think you know us well enough by now to know we'll sell anything for the right price.

So if there was an opportunity to sell it, of course, if that was the right thing for the shareholder. But I think the things that kept us from doing a deal earlier are the same things that would keep us from doing a deal in the future. So we're really focusing on how do we stabilize Tow earnings and how do we take those really unique cellulosic acetate materials and repurpose them into sustainable, high-value products. So that's really our focus in Tow and hopefully that came across in the presentation.

I think when we talk about affiliates, we're really happy with the activities that have occurred around PPC and around KEP. I mean, these were the two big issues we needed to address. Ibn Sina, we already market using our project pipeline, all of the POM molecules coming out of Ibn Sina. So, the value creation for doing something different with that is significantly less than what we saw with some of the other actions we've taken. And Fortron is a JV we're very happy with.

So I would say, I wouldn't expect a lot more activity in JVs. Look, we constantly reevaluate. If new opportunities come up, we will constantly evaluate those as well. But I wouldn't expect any major announcement around restructuring of the other JVs anytime soon.

Hassan I. Ahmed

Analyst, Alembic Global Advisors LLC

Very helpful, Lori. Thank you so much.

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Thanks.

Operator: Our next question is from Kevin McCarthy with Vertical Research Partners. Please proceed with your question.

Kevin W. McCarthy

Analyst, Vertical Research Partners LLC

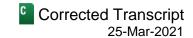
Good morning. In recent months we've heard more and more about various sources of friction in global supply chains, whether it's container shortages or product shortages. And so my questions would be, are you managing your business differently today? And in that context, have you seen any meaningful changes in trade flows because of it? And what have you seen in terms of curtailments among your customers, whether it's in the auto industry or otherwise? Has that had any meaningful impact on your business thus far?

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

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Investor Day



Yeah. Let me ask both Tom and John to comment because, I would say, they're kind of distinctly different issues for each of the businesses. So Tom, do you want to comment on that?

Tom Kelly

Senior Vice President-Engineered Materials, Celanese Corp.

A

Sure. I can start. Yeah. So, how are we managing differently? I'll tell you what, we have a supply chain team that is working more hours than they've ever worked, and a procurement team as well trying to manage through all the different issues you just mentioned, Kevin. But look, in terms of curtailments with our customers, I feel like we've done a great job so far making sure customers get what they need. They don't always get what they want. I think in a lot of cases, they would like to build and get ahead. We're just not at that point with many of our products right now to be able to do that.

As Lori mentioned, as we get worked through Q2, we think we'll be in a much better position to be able to supply everything our customers need. But really to this point, customers are getting what they need to continue operating and supply their customers which is the most important thing, whether it's in auto or electronics or more industrial applications.

John Fotheringham

Senior Vice President-Acetyls, Celanese Corp.



And very similar in acetyls, with regards to the supply chain frictions that you described, Kevin. One of the things that we did during the storm was increase our production in Asia; managed to source vessels to get that product which is of course in liquid form, over to Europe. That's not normally a supply chain route that we would utilize, but we've been able to do that and also increase our production in China as a consequence of the storms.

We have unfortunately let down some customers over the course of the past four weeks. We've been as open and as clear with regard to the issues that we've been facing that the industry has been facing, and we've been working very closely with them as we start to get back up to the rates that Lori described, so that they can start to plan. And we're also seeing significant disruption on many of our small raw materials that we don't typically talk about. We talk about methanol and we talk about carbon monoxide and ethylene.

We've probably got another 50 raw materials which are also severely disrupted. And again, as Tom said, a huge amount of recognition must go to our procurement organization who are working tirelessly to try and find alternative sources of supply which we're approving at the moment, and we do expect that disruption to continue.

Kevin W. McCarthy

Analyst, Vertical Research Partners LLC



Great. And then as a follow-up for Scott, if I may. You obviously announced quite a few projects within the last 24 hours. How do the returns compare to the 20% figure you've experienced over the past three years of return on invested capital? And related, will the CapEx of \$1.5 billion over the next three years be spread evenly to support these investments?

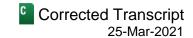
Scott A. Richardson



Executive Vice President & Chief Financial Officer, Celanese Corp.

Yeah. So, I think let me take kind of that whole bucket of CapEx first. The projects we announced are included in the kind of \$500 million per year over the next three years that we talked about. It is largely split, a little bit heavier weighted to acetyls in the first year there with the acetic acid reconfiguration project, but then fairly balanced across both businesses in the two out years.

Investor Day



And at the end of the day, we still kind of look at that 20% threshold return on our total bucket of CapEx as being our target and these projects fit that same criteria that we've historically had, Kevin, now. The one thing I did mention in the presentation, as we do M&A and given the value of deals that we see out there, that return on investment capital overall for the company may come down a bit as we increase M&A, but we still expect it to remain in kind of the high-teens range.

Kevin W. McCarthy

Analyst, Vertical Research Partners LLC

Thank you so much.

Operator: Our next question is from P.J. Juvekar with Citigroup. Please proceed with your questions.

P.J. Juvekar

Analyst, Citigroup Global Markets, Inc.

Yes. Thank you. And Lori, thank you for your detailed commentary on M&A. I think it's clear that you are not a big fan of splitting Celanese and I get that. But did I hear that a split one makes sense unless there is a transformative M&A? Can you explain what you mean by that? And then the other question on M&A is, would you do 10 deals like Nilit and Softer? Or would you rather do one or two larger deals and what are the pros and cons of that?

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Yeah. Great question. So look, the real discussion around the split was just to say, we don't see a value in splitting the company today as it stands. That may be different. In the future, if we were to do a large transformative deal where now you had too much bigger sectors or multiple sectors, that could be different. There's not a lot of value today. If you look at where we're trading and the value of the businesses, there's not a lot of value to be gained today. But we're not ruling it out for the future; could happen in the future if there were some reason for it to happen. So, that's really all we are trying to be clear about and say.

In terms of the size of the deals, look, quite frankly, we would rather do one or two larger deals. We think that will add more value to the company. Obviously, maybe a little bit harder to do, but frankly even small deals take quite a lot of effort to integrate. So, we would rather put our limited resources into integrating one or two larger deals rather than trying to consecutively do 10 small deals like in Nilit or in NEXT or some of those that we've done.

P.J. Juvekar

Analyst, Citigroup Global Markets, Inc.

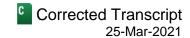
Okay. And then I want to go back to BlueRidge, and you mentioned the cellulose plastic using applications like plastic straws. I mean, I would think consumers would prefer biodegradable plastic straws over the regular plastic straws of those pesky annoying cardboard straws that get wet. Are you able to ask for a higher price, given the characteristics? And otherwise, how do you compete with TE?

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Yeah. Look, it does cost more to make a straw out of BlueRidge, as an example, or really in any of the other applications. But I would say, if you think especially about consumer-facing brands, think about brands that have

Investor Day



built their reputation on being sustainable, environmentally friendly, the cost of the straw is pretty cheap compared to the cost of what they're providing. And so, they are willing to pay a higher price. I mean the indications we have are, they're willing to pay a higher price in order to have a biodegradable component and be able to advertise that they have a biodegradable component.

So, that's really what we've been testing the last year is, okay, it is higher price. Are people willing to pay it? We think the answer is yes. And now, we're just getting through the testing phase with some of these various companies to really make sure that the material meets their needs going forward and that we can provide [ph] it in large enough (02:39:37) volume to meet their needs going forward.

P.J. Juvekar Analyst, Citigroup Global Markets, Inc.	C
Right. And lastly, any idea on how long does it take to degrade that BlueRidge material. Thank you.	
Lori J. Ryerkerk Chairman, Chief Executive Officer & President, Celanese Corp.	Δ
Yeah. It really depends on the thickness; maybe not surprisingly. I mean, it will degrade in almost any environment. Something thinner like a straw is probably less than two months. But if you get something reathick, that maybe there you're talking about more than a year. So, it depends really on the thickness of the material how long it takes to degrade.	ally
P.J. Juvekar Analyst, Citigroup Global Markets, Inc.	C
Thank you so much.	
Operator: Our next question comes from Alex Yefremov with KeyBanc. Please go ahead.	
Aleksey Yefremov	C

Good morning. Thank you for the presentation. In Engineered Materials, in 2018, the prior cycle peak, you delivered about \$700 million in adjusted EBIT. Maybe we can subtract \$40 million, \$50 million for Polyplastics sale. But on the other hand, you will have invested in capacity expansions through 2023. So you're talking about \$700 million to \$750 million EBIT in 2023. Can you may be materially exceed that goal if conditions are as favorable as they were in 2018.

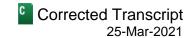
Lori J. Ryerkerk
Chairman, Chief Executive Officer & President, Celanese Corp.

Can you take that?

Tom Kelly
Senior Vice President-Engineered Materials, Celanese Corp.

Yeah. I can take that. So maybe one thing, Alex, just to be clear. PPC in 2018 was actually closer to \$100 million in affiliate earnings, not \$50 million. So, it's a little bit lower. And the way I think about it is, back in 2018 which was really a peak year for EM, our base business EBIT which is earnings without affiliates was around \$460 million. And then, as I mentioned earlier, if you take away the \$75 million of affiliate contribution from 2023, you're

Investor Day



at about \$690 million. That's about 8% earnings growth from 2018 to 2023 on the base business which we think is pretty incredible.

Look, we're going to try to do everything we can to grow even faster if we get more tailwinds, as Lori alluded to earlier. So, faster adoption of electric vehicles, faster growth in 5G, more contribution from sustainable options, offerings that we have out there for BlueRidge and Clarifoil, certainly I think we could do even more than the \$750 million.

Aleksey Yefremov

Analyst, KeyBanc

Thank you. And as a follow-up, your \$13 to \$14 per share EPS target for 2023, what kind of buyback is assumed in those targets?

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Scott?

Scott A. Richardson

Executive Vice President & Chief Financial Officer, Celanese Corp.

Yeah, Alex. We've assumed that the excess cash that's generated will go towards buyback. So, you can do the math on that calculation. It does not include the additional balance sheet firepower that I talked about there.

Aleksey Yefremov

Analyst, KeyBanc

Understood. Thank you.

Operator: The next question is from Arun Viswanathan with RBC Capital Markets. Please proceed with your question.

Arun Viswanathan

Analyst, RBC Capital Markets LLC

Okay. Thanks. Thanks for all the details and congrats on the outlook here. So I guess, first off, again you mentioned that obviously a lot of your markets do experience heightened volatility. We've clearly seen that over the last couple of years, as it relates to automotive in China and the pandemic. So, when you think about the 2021 outlook of \$11 to \$11.50 and the potential for \$13 to \$14 in 2023, what have you contemplated as kind of the factors in that outlook.

I would assume, it's not productivity and stuff you control, i.e., the business enhancement or organic, but rather M&A and what materializes there and then maybe even see acetic acid VAM price margin. And on that last point in acetyls, do you still see the opportunity for global operating rates to rise maybe 1 or 2 points a year, i.e., this demand growth still outstrips supply growth by that 1% to 2% each year or so?

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Yeah. So if we look at 2023 versus 2021, we actually [ph] tickle in (02:44:00) how we came up with that outlook. So we actually assumed a more normalized market environment. So not kind of the peak environment, not the

Investor Day



high rate of recovery we're seeing, but going back to a more foundational level of pricing as what we've seen say in the last five years or so. So we're not assuming peak markets continue, whereas assuming a more normalized reversion to mean kind of average going forward.

As Scott said, we've assumed all excess cash is converted to share buybacks. That's just an easy way to do the math. Obviously, if we can do M&A, we'll get at least that kind of return or potentially even higher if we can do larger or more transformational M&A. And again, volume growth is based on demand growth that we see as generated by our project model in EM as generated by our flexible and optimal model in acetyls and with a flat AT.

So, pretty much I would say nothing outstanding in that projection for 2023, just continued good operation, continued productivity at the \$150 million to \$200 million level that we've demonstrated over the last many years. And again, the growth that we've outlined as it comes on; most of it coming in at the very end of that period actually.

Arun Viswanathan

Analyst, RBC Capital Markets LLC

Okay. Thanks. And as a quick follow-up, just another question on EM. I think you've done a great job of adding substrates and growing out your platforms. Are there any areas that you're underpenetrated then still that you're looking to add to the portfolio? And when you do that, do you see share gains with existing customers? Does that say increase your hit rate when you do those such moves? Thanks.

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Tom?

Tom Kelly

Senior Vice President-Engineered Materials, Celanese Corp.

Yeah. Look, we would always like to add more tools to our toolbox per se I'd mentioned before, some of the polymers that we would like to add to the portfolio. Because look, in the end there is much more plastic in a vehicle, there's much more plastic in the medical and pharma market than we have access to right now. So we'd always like to add more. And those are probably the two areas in particular we're most interested in as well as electronics. If we were to move into more high heat nylons, we could probably grow our electronics business even faster. So yeah, those are probably the main areas that I would focus on.

Arun Viswanathan

Analyst, RBC Capital Markets LLC

Thanks.

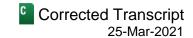
Operator: Our next question is from Matthew DeYoe with Bank of America. Please proceed with your question.

Matthew DeYoe

Analyst, Bank of America Merrill Lynch

Hi. Thanks. Where are you planning on sourcing the waste CO2 for Clear Lake? Is that just your own waste? And then, one of your commodity peers announced a JV with a major steel company to utilize CO2 stream to make

Investor Day



[indiscernible] (02:47:05). Is that kind of strategy for waste CO2 conversion possible on a higher and broader scale, or is it too small of an opportunity to really expand dramatically for well-scaled chemical assets?

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Α

Do you want to take the first part of that question?

Tom Kelly

Senior Vice President-Engineered Materials, Celanese Corp.

Д

Sure. Thanks. Thanks, Lori. Yeah. You're right, the CO2 that we're going to be consuming actually comes from our current off-gas, if you will, at Clear Lake.

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.



I think the important thing to realize is the purity of the CO2 is important. I mean, you do have to purify, you do have to clean up a CO2 stream. So that's why we can very cost effectively convert off-gas in Clear Lake into recycled CO2. If you talk about now starting to recover CO2 from furnace stacks, for example, there is a lot more impurity and a lot more cost associated with purifying that sufficiently to be able to add it to syngas and then synthesize it to methanol.

So, I think the strategy is possible on a higher scale. In theory, any CO2 off-gas can be converted to methanol, but it's a question of capital efficiency of doing so, and there the source of the CO2 off-gas becomes highly important.

Matthew DeYoe

Analyst, Bank of America Merrill Lynch



Fair. That makes sense. And then, lastly, the \$100 million of EBIT opportunity highlighted in the Acetyl Chain, is that associated primarily with the Clear Lake expansion or is that based on optimization and lower operating costs? And the additional expansion was in excess to that \$100 million or is it all holistic?

John Fotheringham

Senior Vice President-Acetyls, Celanese Corp.



The \$100 million opportunity that we outlined for 2023 is actually precedes the Clear Lake reconfiguration. So, it really is based upon those strong fundamentals, the supply demand that I described earlier, as well as our ability to continue to grow with the market that's growing and continue to derivatize our acetic acid and VAM into the more value-added emulsions, and now more excitingly than ever into the redispersible powders where we see considerable near-term growth available to us.

Scott A. Richardson



Executive Vice President & Chief Financial Officer, Celanese Corp.

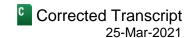
And the \$100 million that's generated by the Clear Lake project, Matt, is really coming from both – mainly from cost reduction of optimizing the footprint as well as a little bit of incremental volume from having tons to be able to grow, as the market grows. But as John mentioned earlier, that largely will hit our P&L after 2023.

Matthew DeYoe

Analyst, Bank of America Merrill Lynch



Investor Day



All right. Thank you.

Operator: The next question is from Matthew Blair with Tudor, Pickering, and Holt. Please proceed with your question.

Matthew Blair

Analyst, Tudor, Pickering, Holt & Co. Securities, Inc.

Hey, good morning. Thanks for all the details and the presentation. On the recycled CO2 project at Clear Lake, does this qualify for a Section 45 carbon capture tax credit? And are you looking to expand this? Would you require this for methanol that you procure in the future?

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Great question. I'm not actually sure about the tax credit. I would actually – you may know, Scott. But I think we'll certainly look – we do believe, desire for more recycled, more bio-sourced materials is important to our customers and important to our product portfolio going forward. So we will continue to look for opportunities to do things like recycled CO2 to meet that demand certainly. I would say, our desire to do it here is, it's a cost effective way to expand our methanol capacity and have a more sustainable product. So, you may know the answer on that.

Scott A. Richardson

Executive Vice President & Chief Financial Officer, Celanese Corp.

Yeah. And Matthew, regarding the tax credit, we're in that process now of really looking at what opportunities are there. And as the project is just kicking off, that application process is ongoing currently.

Matthew Blair

Analyst, Tudor, Pickering, Holt & Co. Securities, Inc.

Sounds good. And then I have a question for Scott. On slide 16, you showed the \$2 billion of additional debt capacity that could be used for buybacks [indiscernible] (02:51:26) for opportunistic deployment. Could you provide any more details on, under what conditions would you lever up to buy back shares? Is that purely like a valuation consideration or what are the things that are you looking at here?

Scott A. Richardson

Executive Vice President & Chief Financial Officer, Celanese Corp.

Yeah. So Matthew, let me just clarify. That \$2 billion that we had on that slide, we have not included that in the EPS calculation. So we have not assumed that we would lever up that \$2 billion to buy back shares in this strategic plan. It's really highlighting that that is additional firepower that is there and we really look at being opportunistic with that. And as earnings grow, that debt capacity then exists for us to lever up and still comfortably remain investment-grade which is our stated strategy. So, we would really prioritize accretive and opportunistic M&A for that debt capacity.

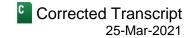
Matthew Blair

Analyst, Tudor, Pickering, Holt & Co. Securities, Inc.

Great. Thank you.

Operator: Our last question today comes from Laurence Alexander with Jefferies. Please go ahead.

Investor Day



Laurence Alexander

Analyst, Jefferies LLC

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Good morning. Can you talk a little bit about your longer-term decarbonization targets and do you expect the investments there to have positive return. And then with respect to BlueRidge, many of the bioplastics players talk about capital intensity north of about \$1.50 or \$2 a pound. If the single-use plastic market does transition which takes off, can you do better than that?

And then just lastly on productivity, can you just clarify should the dollar value realized and productivity grow with the asset base and sales? Or do you see kind of a historical run rate as a good benchmark for productivity over say the next five to seven years.

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.



Great. Let me start with first one. So look, on decarbonization, we've spent a lot of time in 2019 and 2020, trying to really understand our footprint, trying to verify the numbers. Quite frankly, we found that we weren't measuring everything in our system. So, we've really been making sure we understand what our baseline is. And then from there saying, what are targets that we can set that we actually know how to get there. I mean, it's really important for me, it's really important for Celanese that if we set a target that we are committed to getting there.

So, that's why we've set the targets we have. As we understand this better as we go forward, we will be setting further targets for decarbonization. But I want to make sure we set a target we can get. We're not going to set a target just to make people happy. We have a target. We're going to set a target that's meaningful to the company and important to our future, important to the future of the world and important to our investors.

So, it will be coming, but we wanted to do the homework first, if you will, to make sure that what we say is something we can really deliver on. I think there are still a lot of opportunities to get a positive return on the investments we're making. I mean, you can see we're doing those now with things like our combined heat and power at Lanaken like the CO2 recycle.

At some point, not everything will have a return or the world will need to evolve and there'll need to be a demand from customers for these projects and from customers who are willing to pay for the excess cost of these. But I think we're still a ways from there. There are still some low-hanging fruit, if you will, of things that we can do in this area which is what we're focused on in this 2023 time period.

Look, I think on BlueRidge, do you want to take that, Tom? Go ahead.

Tom Kelly



Senior Vice President-Engineered Materials, Celanese Corp.

I can take that. It's funny, I just – Laurence, should you maybe do that on my head because I never heard that number before; that \$1.50. But I would think about us being about 30% below that number. And keep in mind, it's because we're leveraging existing assets that we have in there to produce acetate flake.

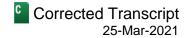
Scott A. Richardson



Executive Vice President & Chief Financial Officer, Celanese Corp.

Yeah. And then the last question you had long-term productivity. I think we are really looking at that historical growth productivity run rate of \$150 million to \$200 million remaining, because our asset basis are relatively stable right now. Now as we add new assets, that will allow us to address different opportunities in the future. The

Investor Day



one thing I would say is, as we continue to evolve on some of these more sophisticated types of proactivity as we use data analytics and artificial intelligence in more creative and clever ways, that could open up a new set of targets for us in the future.

Laurence Alexander

Analyst, Jefferies LLC

Thank you.

Operator: That concludes our question-and-answer session. I would like to turn it back over to Lori.

Lori J. Ryerkerk

Chairman, Chief Executive Officer & President, Celanese Corp.

Thanks, Alyssa. So we'd really like to thank everyone for taking the time to join us today. Over last three hours or so, I hope we have conveyed to you how really optimistic we are about the future of Celanese. Again, I'm so confident in the strength and the passion of our people and the strength of our business that will continue to meet our customer needs and drive growth well beyond what we've outlined today into our end markets.

In turn, we're also committed to being disciplined stewards of the capital we generate and investing that capital in ways that will maximize shareholder value in the future. So thank you, again, for joining us. Have a wonderful day.

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